



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>







*Library of the University of Michigan*  
*Bought with the income*  
*of the*  
*Ford - Messer*  
*Bequest*



W. F. A. B. R.

**JOURNAL**  
**OF THE**  
**CEYLON BRANCH**  
**OF THE**  
**ROYAL ASIATIC SOCIETY.**  
**1856-58.**

---

---

**VOL. III.—PART I.**

---

---

**No. 9.**

---

*EDITED BY THE HONORARY SECRETARY.*

---

"THE DESIGN OF THE SOCIETY IS TO INSTITUTE AND PROMOTE ENQUIRIES INTO THE HISTORY, RELIGION, LITERATURE, ARTS, AND SOCIAL CONDITION OF THE PRESENT AND FORMER INHABITANTS OF THE ISLAND, WITH ITS GEOLOGY, MINERALOGY, ITS CLIMATE AND METEOROLOGY, ITS BOTANY AND ZOOLOGY."

---

**COLOMBO :**  
**PRINTED AT THE "TIMES OF CEYLON" PRESS.**

---

**1883.**



*Frid. Messer*  
*Sath,*

## CONTENTS.

	PAGE.
Entomological Papers, being chiefly Descriptions of Ceylon Coleoptera, with observations on their habits, &c.— By J. NIETNER, Esq. ... ..	1
Description of new and little-known Species of Ceylon Nudibranchiate Molluscs, and Zoophytes.—By E. F. KELAART, Esq., M.D. ... ..	76
Account of the Works of Irrigation constructed by King Parákrama Báhu, contained in the 68th and 79th Chapters of the Maháwamsa, with Introductory Re- marks.—By L. DE ZOYSA, Mudaliyár ... ..	125
Topographical and Statistical Account of the District of Nuwarakaláwiya.—By A. O. BRODIE, Esq. ...	136





# ROYAL ASIATIC SOCIETY.

---

## CEYLON BRANCH.

---

ENTOMOLOGICAL PAPERS; BEING CHIEFLY DESCRIPTIONS OF NEW CEYLON COLEOPTERA,

WITH SUCH OBSERVATIONS ON THEIR HABITS, &c., AS  
APPEAR IN ANY WAY INTERESTING.

BY J. NIETNER, ESQ.,

Member of the Society of Naturalists of Berlin, Entomological  
Society of Stettin, &c.,

---

### No. I.

*Introductory Note on the publication of New Species under disadvantages such as describing Entomologists necessarily labour under in countries remote from European centres of science.*

I **LITTLE** doubt that the following descriptions of new *Coleoptera* will meet with anything but approbation from the Entomological world at home. As, however, in spite of this anticipation of an ungracious reception, I do not for the present intend to desist from my purpose of publishing such descriptions, I may as well try to vindicate this measure by setting forth the reasons which induce me to consider the difficulties which beset the path of the entomological author in this country as not insurmountable.

The objections raised against me will be these:—considering the state Entomological literature is still in—that is to

say, considering that it has not, generally speaking, been condensed into a certain limited and obtainable number of volumes, as is the case in the higher branches of Zoology and Botany; that, on the contrary, the bulk of it consists of fragments which float without order in the misty and unfathomable ocean of scientific journals; it is next to impossible that an individual entomologist abroad should surround himself with this shapeless mass of learning, and keep himself, by this, or other means, so well informed of the details of the actual progress of the science, as not to be exposed to mistakes of one kind or another, but more specially to creating synonymy\* in attempting to work independently. It will further be said against me, that not having the facilities and the wholesome check which arise from the diligent use of extensive and well-named collections, not even having the gratification of a brother entomologist's views and opinions on doubtful cases, it will be impossible even to determine whether an insect be new or not; and from these reasons (the *résumé* will be) entomologists abroad should confine themselves to collecting and observing the habits of the objects of their attention, but

---

\* *Synonymy* is, and always will be, an unavoidable evil to which descriptive science is liable under *any* circumstances. My arguments are merely intended to uphold the possibility to reduce it to such a nature, and to limit it to so small an extent, as to be of little importance if weighed against the merits the publications in which it occurs may be possessed of in other respects, and, therefore, to be pardonable. In case, however, I should eventually ascertain that I am mistaken on this point, I shall then abandon my pursuits, or at all events, my present mode of following them up. I feel certain, that every enthusiastic naturalist, who has travelled in foreign parts, will support my cause, and understand and appreciate my striving to become the herald of my own discoveries.

I am well aware that there is more than one way to attain this end, and that the one I have selected is perhaps not the best; but circumstances have hitherto barred me from those upon which I might lay myself less open to censure. In a position like mine only, where they are my principal support, books are well tested; and whoever has tested them under such circumstances, will know that much of the synonymy created abroad, is referable to them, and *not* to the student.

they should never go to print with matters on which it is an impossibility for the ablest among them to be quite competent. These arguments are unfortunately too true, but still, I think, admit of being mitigated sufficiently to come to final conclusions less disheartening to the entomological student abroad than the above.

First of all, every entomologist gives preference to a certain order of insects—say *Coleoptera*—and in this even, in almost all cases, to one or two particular families. In studying for the publication of new species, under the disadvantages just mentioned, he will confine himself to this order, or perhaps family. Now, although as objected above, the information existing on this particular branch, is for the most part fragmentary, still there are certain families, on which it has received tangible shape, through condensation by old hands:—Burmeister's *Lamellicornia*, Dejean's *Carabidæ*, Erichson's *Staphylindæ*, Schoenherr's *Curculionidæ*, Boheman's *Cassidæ*, Westwood's *Paussidæ*, etc., as well as the latter author's general work on the families, and Lacordaire's on the general *Coleopterorum*, diligently consulted, go as guides a long way, and should, although some of them have by the rapid progress of the science grown rather antiquated, guard against a number of mistakes of a systematic nature.

As to whether a beetle be new or not, I admit that in forming an opinion on this question, the entomologist, situated as above, will have quite as much to be guided by a certain tact (not clearly definable, but understood by scientific men) than by anything else; and I am forced to concede that under any circumstances almost, it is totally impossible to arrive at an *indisputable certainty* either the one way or the other. This, however, excludes by no means the possibility of his forming an opinion with so much precision as to enable him to pronounce in the matter with a very *high degree of confidence and all probability* in his favour. In attempting to come to a decision on this difficult point, he will receive a first superficial idea, from careful reflection on certain accidental circumstances, such as size, scarcity, or other peculiarities of the insect in question.

This idea, whichever way it may incline, will then either gain or lose in strength by diligent reference to his library, until at length, with a certain amount of tact and judgment, he will arrive at a result which, under such circumstances, must carry much weight with it.

I shall illustrate this case by an example. If, for instance, after collecting five years in Ceylon generally, and in the Western Province more especially, I find at the latter place an insect—say the *Ohlænius pulcher* described below—for the first time—am I not entitled to consider it as very scarce? If on consulting my library I discover nothing which can possibly refer to it (finding that not a single *Ohlænius* is marked as occurring in Ceylon), are not the chances greatly in favour of its being an undescribed species? If, again, I collect beetles as small and inconspicuous as the *Trichopteryx* described below, and consider at the same time, that, although they are in certain localities of common occurrence, no professional Coleopterologist has ever collected them before me in this Island; if moreover, again, my library offers nothing that could possibly refer to them individually (there being hardly an Asiatic species mentioned),—am I not under these circumstances justified in considering them as undescribed? Decidedly. Circumstances like these would indeed be altogether conclusive, if there was not a chance of the beetle occurring in some neighbouring country, and its having thence found its way into the normal collections of Europe. The possibility of such being the case, enhances the difficulties of the case of course very materially; and I am forced to admit that the means of overcoming them are very unreliable. One deficiency, descriptions of new species furnished under these circumstances, will almost always have: namely, the comparison (so desirable, if not essential, in large genera) with another allied and known species, will be wanting; but this stands or falls with the system from which it is inseparable.

I think I have said enough to shew, that the disadvantages the entomologist encounters here, or in other places similarly situated, in *conscientiously* attempting to publish new species

may (his principal assistance being perseverance, a good library, and tact—entomological instinct I am almost tempted to call it)—I am far from saying *entirely*,—be overcome so far as to expose him, from *want* of resources in the execution of his plan, to *no more mistakes* than entomologists expose themselves to under more favourable circumstances from *neglecting* them.

But I am not satisfied with obtaining the simple grant of permission to describe on the spot a part of what he collects. I claim more for the entomologist abroad. I wish to show that he should naturally be expected, nay desired, to do so; for although he labours under distressing disadvantages in some respects, he happily enjoys a proportionate share of advantages in others. It is unsatisfactory in the extreme for an enthusiastic entomologist to be obliged to let his collections go out of his own hands,—see others reap the honors from them, which are to be reaped on such occasions,—or perhaps see as it were a gulf close over them, hear no more of them, and find himself forgotten. For what is a mere collector? Let him display as much industry as possible, he is hardly looked upon as an entomologist—certainly, as long as he is prevented from publishing anything, not as a scientific one. Now, if such a man merely desists from publishing the fruits of his researches from want of resources to assist him to go creditably through such a task,—if he suffers his collections to go out of his hands, because he is too true a lover of science not to see the credit in a great measure due to himself reaped rather by another than to hoard up his entomological treasures, a useless heap, eventually to be destroyed by moths and time—I say, that a man who acts upon principles like those, finds himself not seldom disheartened in the prosecution of his studies under difficulties such as I have set forth. If, however, as I have endeavoured to point out, these difficulties can be overcome to a very considerable extent, is anything more natural than that he should be the herald of his discoveries himself? Could anything be more unkind and ungenerous on the part of his scientific



brethren at home, than to oppose and discourage him by their disapprobation?

I might enlarge on this subject, which has been a sore one with me for a long time, to a great extent, but I think this is sufficient to direct the reader into the train of my ideas and to enable him to follow it up.

I hasten therefore to conclude. As mentioned above, the Tropical entomologist has a proportionate share of advantages to balance what falls to his lot of the contrary; one of these advantages which he has over his brethren at home is, that he has an opportunity of seeing and studying alive what can at home only be examined in state differing more or less from that of life. Therefore, if he is *enabled* and *expected* to describe new species, it is moreover *highly desirable* for the sake of the promulgation of *sound* information, that he should do so, that he should avail himself of this, his principal advantage, and describe, fresh from nature, as many of his favourites and their habits as possible; and discouraging him in such an undertaking on any of the above grounds would be discouraging the progress of science in general.

### 1. CHLÆNIUS PULCHER. N.

C. elongatus, subconvexus, subglabratus, æneo-viridis, elytris obscurioribus, limbo pedibusque flavis, subtus piceus. Long. corp. 6½ lin.

Caput oblongum nitidissimum, ante oculos 2-impressum. Mentum dente fortiter excavato. Antennæ art. 3<sup>o</sup> quarto sesqui longiore. Thorax obcordatus basi angustatus quadratus, latitudine antica quarta parte longior, parce punctulatus, antice lateribus deflexus, postice dorsoque planus, basi 2-impressus. Elytra striata, ad striae, præcipue apicem versus, subtilissime pilosa, flavo-marginata. Pedes flavi, spinulis castaneis. Abdomen flavo-marginatum.

Specimen singulum m. in ripis Mahæ-Oyæ fluvii prope Negombo cepi.

Distinguished by its elongate shape. The head is of a bright green colour with the labrum and the mandibles of a deep, and the antennæ and palpi of a light brown, the latter being darkened towards the end. The thorax is of the same colour as the head, reflecting a copper hue from the back, its anterior angles are obtuse, the basal ones being righte

elytra are of the same greenish copper colour but darker; they are impressed with longitudinal lines, which are bordered on each side by a row of minute hairs. They as well as the abdomen have yellowish margins.

## 2. CHLÆNIUS REGULOSUS. *N.*

*C. subconvexus, subglabratus, thorace occipiteque rugulosis cupreis, elytris nigro-viridibus, pedibus elytrorum limbo lunulisque apicalibus flavis, subtus piceus, abdomine apice margineque flavis. Long. corp. 6½ lin.*

Caput fronte 2-impressum subtilissime longitudinaliter rugulosum. Menti dens laciniis extus rotundatis. Thorax ovatus basi quadratus lateribus valde deflexus, postice obsolete 2-impressus, parce punctatus, subtiliter transversim rugulosus. Elytra striata, stais apicem versus per paria coeunsibus, ad strias, pilosa, apice utrinque lunula flava signata. Pectus abdomenque picea, hoc, segmentis 2 ultimis, præcedento dimido margineque flavis.

Specimen unicum f. ubi præcedentem cepi.

The head finely longitudinal, the thorax transversely rugose; the latter with rounded and deflexed sides. The mandibles are of deep brown, the palpi and antennæ of yellowish colour darkened towards the tip. The lobes of the mentum tooth are externally rounded. The elytra are marked by two subapical spots of yellowish colour and semilunar shape (the back of the lunulæ being turned towards the suture). The striæ verge near the apex by twos into each other. The abdomen is distinguished by having a yellow margin and apex.

## 3. SCARITES MINOR. *N.*

*S. elongatus, niger, nitidus, subtus nigro piceus, pedibus piceis, tarsis, antennis palpisque castaneis. Long corp. 5 lin. lat. 1½ lin.*

Caput subquadratum, ante oculos 2-impressum, pone oculos irregulariter sulcatulum. Mandibulæ validæ inter medium et basin fortiter dilatæ, obtuse dentatæ, dextera dente obtuso subapicali, supra subtusque longitudinaliter sulcatæ. Antennæ art. 1<sup>o</sup> sequentium trium-, 2<sup>o</sup> tertii prope longitudine. Thorax oblongo-quadratus, angulis anterioribus obtusis, posterioribus oblique truncatis. Elytra thoracis capitique prope longitudine, striata, ante medium ad striam 2m uni-apicem versus ad striam 3m 2-punctata, punctis piliferis, basi granulata,

angulis oblique-truncatis. Pedes anteriores tibiis apice extus 5 dentatis, dentibus 2 ultimis parvis, omnes tarsi subtus leviter excavatis.

In prov. occid. arenis humidis sub vegetab. putrescent. specimina nonnulla legi.

Scarce, but little distinguished excepting by its small size. The head is subquadrate, in front with two deep longitudinal impressions, behind the eyes finely sulcated. The labrum is of the usual shape, the eyes are not very prominent. The antennæ are of about the same length as the head; the first joint is about as long as the three following together; the second, which is generally longer than the third, is in this case of the same length, joints 1-4 are naked, 5-11 pilose, increasing towards the tip gradually in size and thickness, taking at the same time a subquadratic and depressed shape. The mandibles are strong, much dilated and dentated from before the middle to the base, the right one having additional subapical tooth. The maxillæ also are strong, but slightly bent at the apex, where they are also slightly excavated. The labial palpi have the last joint longer than third, elongated and elliptic. The thorax is oblong, with the basal angles obliquely truncated. The elytra are oval, striated, granulated at the base, and have, as has also the thorax, a narrow margin. The anterior tarsi are furnished externally with five teeth, the two last ones of which, however, are very small. The posterior legs are similarly provided, but the teeth are indistinct. The joints of the tarsi are slightly excavated below. The sides of the body below are rugose.

#### 4. CLIVINA RUGOSIFRONS. N.

C ferruginea, capite, thorace abdomineque piceis. Long. corp.  $4\frac{1}{2}$  lin lat  $1\frac{1}{2}$  lin.

Caput rugosum, inter oculos elevatum, elevatione plana antice profundè impressa. Mentum lobis subtiliter sulcatis. Antennæ robustæ thoracis medium vix attingentes, art. ultimo elongato penultimo-, art. 2 tertio sesqui longiore. Thorax subquadratus antice parum angustatus elytrorum latitudine, subtus parce punctatus, prosterno sulcato, Elytra striata, in striis punctata. Pedes tibiis anterioribus apice extus 4 dentatis subtus excavatis, reliquis fortiter spinosis, tarsis articulis margine apice setoso.

In prov. occid. sub vegetab. putrescent. infrequentissime legi.

A large and distinguished species. The head is very rugose, the clypeus is contracted behind the apical angles, and then produced again into another pair of angles. The labrum is transverse, slightly sinuated in front, with the angles rounded and setose. The mentum is quadrate, the lobes rounded at the apex and slightly sulcated, the tooth is strong, of equal length with lobes, and of the typical spear-headed form. The ligula has the apical angle much elongated, terminating in a membranaceous bristle which is bifurcate at the tip. The maxillary palpi have the last joint elongate, cylindrico-conic: that of the labial ones is still more elongate, elliptic. The antennæ have the basal joints elongate, those towards the tip rounded. They and the legs are hairy, otherwise the insect is of a bright polished surface.

#### 5. CLIVINA ELONGATULA. N.

*C. elongata*, subdepressa, supra nigro-picea, subtus picea, pedibus elytrorumque margine castaneis, antennis oreque dilutioribus. Long. corp. vix 3 lin. lat.  $\frac{1}{2}$  lin.

Caput triangulare, subtiliter punctato-rugosum. Palpi articulo ultimo apice leviter truncato. Thorax oblonge quadratus, infra apicem leviter sinuosus, parce obsoleteque transversim strigosus. Elytra striata, in striis punctata, ad striam 3<sup>m</sup> utrimque 4 punctata. Subtus parce punctata.

Ebi præcedentem frequenter legi.

I have not dissected the labium of this species, which, however, is at once recognised by its depressed and, in proportion to its width, very long shape. The labrum, antennæ, and legs, are so much like those of the former, that they need no further description.

#### 6. CLIVINA MACULATA. N.

*C. picea*, elytris ferrugineis infra medium macula nigra obsolet ornatis, pedibus intermed. et post. oreque brunneo-testaceis, pedibus ant. antennisque obscurioribus. Long corp. 2 lin.

Caput oblonge quadratum, rugosum, costis 5 magis minusve interruptis ad marginem anteriorem in dentes 4 productis munitum. Palpi art. ultimo basi intus incrassatto. Antennæ art. 2-3 subæqualibus. Thorax subquadratus leviter rotundatus. Elytra striata in striis profunde punctata.

Ubi præcedentes specimen singulum legi.

As distinguished as the preceding two species. The palpi and the mentum appear to me of a somewhat extraordinary form. The last joint of the former is considerably and more inflated at the base than in any other Ceylon species that has hitherto come under my notice, whilst the others are of a very curved appearance in both the maxillary and labial palpi. The insect is, however, easily distinguished by its general facies, which is rather like that of a *Dyschirius*; from which genus, however, the mentum alone is sufficient to separate it. I may as well remark here, that, although the Island is well supplied with *Scarites* and *Olivinas*, I have hitherto not discovered a single *Dyschirius*, a genus so well represented in Europe. Of the three *Olivinas*, just described, single specimens only have been in my possession for a considerable time. There are three or four more species met with about Colombo, but these being of common occurrence, I abstain from describing them here, as they may possibly be amongst those described by Putzeys or others from the Indian continent.

#### 7. *ÆDICHIRUS ALATUS*. N.

*Æ. alatus*, setosus, nitidus, rufo-testaceus, thorace dilutiore, capite, elytris abdominisque segmentis 3 ultimis nigris; elytris apice 2 maculatis, maculis rufo-testaceis; pedibus flavis, femoribus apice tibiisque basi nigrescentibus; antennis palpisque maxill. basi obscuris, apice testaceis, reliquis oris partibus rufo-piceis. Long. corp.  $3\frac{1}{4}$  lin.

*Æ. pæderino* Er. similimus, præter colorum distributionem differt tamen *alis*, elytrorum antennarumque articuli ultimi sculptura. Antennæ art. ultimo penultimo aequali nisi paulo minore, apice fortiter *truncato* leviterque excavato. Thorax *Æ. pæderini*, dorso punctis biseriatim impressus, serie interna vel centrali elliptica punctis minoribus magis inter se approximatis, externa vel submarginali punctis magnis distantibus. Elytra oblonge subquadrata, infra medium rotundata, thorace *longiora* et duplo fere amplior (utrumque elytrum thoracis fere magnitudine), basi parte thoracis adjacente *duplo*-, infra medium illius latitudine antica plus tertia parte latiora. Os, pedes et abdomen *Æ. pæderini*.

*Pæderorum* more victitare videtur; in eorum societate in lacus Colombensis ripis infrequentissime legi; illis minus gracilis atque minus agilis.

I have not had an opportunity of examining specimens of either of the three *Ædichiri* hitherto described. However, I



have before me Erichson's figure and description of the Sicilian *Æ. pæderinus*, with which I find my species strongly to agree. It differs, however, from the former materially in the following three points, viz., the wings, the sculpture of the wing-covers, and the last antennal joint. The fact that this species has wings, would render an alteration in Erichson's diagnosis of the genus necessary, it being characterized therein as "apterous". The elytra are not so much contracted and rounded at the base, and, being longer than the thorax, have therefore a more oblong, subquadratic appearance. As in the above typical species, they are, however, rounded at the sides and broadset a little below the middle. They are about twice as broad at the base as the adjoining part of the thorax; and in their broadest part rather more than a third broader than the thorax in its. The third point, in which the two species differ, is the last joint of the antennæ, which, in this case, is strongly truncated at the tip and slightly excavated. They are further distinguished by the distribution of the colours, my species being of a dark yellowish red, thorax lighter, head, elytra and three last abdominal segments black, elytra with two reddish spots at the apex, legs yellowish, at the apex of the femora and base of the tibiæ blackish, the mouth is brown, the maxill. palpi yellowish with the three first joints dark at the base, the antennæ have the six basal joints dark excepting at the apex, where they, as well as the five remaining ones, are yellowish. In all other points I find the insect to agree entirely with the typical *Æ. pæderinus*: the palpi, legs, and anal segment of abdomen are of the same structure, the hairy vestiture is exactly the same in the different parts of the body of my species as it is in the corresponding ones of Erichson's.

---

## No. II.

## I. ANCHISTA, n. g. N.

## Fam. CARABIDÆ.

## Trib. LEBIIDÆ.

Corpus depressum, ovatum. Caput magnum, oculis mediocribus, semiglobosis, prominulis. Mentum dente magno obtuso, lobis parum brevioribus, his extus rotundatis, apice acuminatis. Palpi robusti, maxillares art. ultimo magno ovato, apice obtuso, labiales art. ultimo valde securiformi. Ligula cornea apice obtuse acuminata, labri marginem anteriorem attingens. (Paraglossæ mihi adhuc non dissectæ.) Labrum transversim quadratum. Mandibulæ simplices apice arcuatæ et ocuminatæ. Antennæ robustæ thoracis basin attingentes, art. 1<sup>o</sup> mediocri, 2<sup>o</sup> brevi, 3<sup>o</sup> quarto paulo longiore, 4-10 subæqualibus, 11<sup>o</sup> penultimo parum longiore. Thorax longitudine latior, angulis anticis rotundatis, medio obsolete angulatus, basi angustatus, quadratus. Elytra apice quadrate truncata. Pedes robusti tarsis art. 4<sup>o</sup> profunde bilobo, unguibus fortiter pectinatis.

## 8. ANCHISTA MODESTA. N.

A. brunneo-testacea, elytris, (maculis 2 obsolete subhumeralibus exceptis) obscurioribus, oculis nigris, abdomine piceo. Long corp 4 lin.

Caput fronte medio leviter uniimpressa, Thorax profunde longitudinaliter canaliculatus, lateribus fortiter depressus. Elytra in regione media depressa apicem versus parum dilatata, striato-punctata, ad striam 2<sup>m</sup> punctis 2 majoribus subapicalibus, cum thorace marginata.

Specimen singulum m. prope Colombo nocte ad lumen cepi.

The characteristics of this new genus are those of the g. *Calleida*, excepting the ligula which in this case is obtusely acuminate, the last joint of the maxill. palpi which is obtuse at the apex, and the thorax, which is not as in *Calleida* longer than broad, but the reverse. From *Cymindis* it would differ principally in the deeply bilobed fourth tarsal joint, and in some other minor points, but it is difficult to say what the true characteristics of this genus are, if even Lacordaire uses the particle "ou" not less than five times in the diagnosis he gives of it in his g. d. Col. It would also appear to be allied to *Plochionus*, differing from this g., however, in the obtuse extremity of the terminal joint of the maxill. palpi, and the deeply bilobed fourth tarsal joint. However, if Lacordaire's diagnoses are exact, I feel justified in separating *Anchista* from all these genera. The name "*Anchista*,"

has reference to the affinity of the insect to the two genera just mentioned, whilst the specific name "*modesta*," refers to its inconspicuous colours. Amongst its peculiarities weight ought to be laid upon the plumpness of the palpi, in fact all other parts of the mouth and even the whole head, which was very striking to me.

Like many of my best *Carabidæ* I found this insect at night on the table, whither it had been attracted by the light. The anterior tarsi are dilated and furnished with hairy brushes below, longest at the apex of the lobes of the fourth joint.

## II. ELLIOTIA. n. g. N.

### Fam. CARABIDÆ.

### Trib. LEBIIDÆ.

Corpus subconvexum, ovatum. Caput medioere, oculis maximis. Mentum leviter transversim emarginatum, edentatum, lobis acuminatis. Ligula submembranacea apice truncata, paraglossis connatis marginem anteriorem parum superantibus, obtusis. Palpi elongati, art. ultimo elliptico, acuminato. Labrum magnum transversum, integrum, mandibulas fere obtegens. Mandibulæ validæ, edentatæ. Antennæ robustæ filiformes, humeros, superantes, art. 1<sup>o</sup> medioeri, 2<sup>o</sup> brevi, 3<sup>o</sup> quinti popre longitudine, 4<sup>o</sup> præcedente brevior, 2-4 obconicis, 5-10 æqualibus, cylindricis, 11<sup>o</sup> præcedente tertiâ parte longiore, 4-11 pilosis. Thorax parvus, capite minor, transversus, longitudine duplo latior; antice leviter emarginatus, lateribus elevato-marginatus, ante medium, lateribus rotundatus, medio fortiter angulatus, infra medium valde abrupteque angustatus, basi truncatus, subtus cylindricus. Scutellum leviter excavatum. Elytra ovata, marginata, apice sat fortiter truncata. Pedes omnes subæquales, simplices, tennes, tarsis cylindricis art. 3-4 magis minuse trigonis, unguibus simplicibus. Prosternum carinatum.

In honorem Dom. Hon. Walteri Elliotti (Maderaspatani), naturalistæ diligentissimi, meritissimi, nomen imposui.

## 9. ELLIOTIA PALLIPES. N.

E supra nigra, nitida, thorace scutelloque rufo-testaceis, labro elytrorumque limbo atque sutura brunneo-testaceis; subtus piceus, pectore rufo-testaceo, pedibus albidis, his geniculis oreque (palpis obscurioribus exceptis) testaceis. Long. corp. 2½ lin.

Caput ad antennarum insertionem et inter oculos utrinque profunde impressum. Thorax basi rugosus, ante medium utrinque uni-impressus, linea media longitudinali divisus. Elytra punctato-striata, infra humeros leviter impressa.

In ripis lacus Colombensis sub veget. putrescent. mens. Jul. non infrequenter legi. Agilis est et avolare semper expeditus.

A pretty and very interesting little insect, about whose systematic position I am not quite satisfied; however, I provisionally place it towards the end of the true *Lebiidæ*. I find it most to agree with the descriptions of the g. *Pentagonica* S. G. and *Rhombodera* R., with neither of which, however, it is identical. The head is distinguished by the large and prominent eyes, and four deep impressions, two larger ones at the root of the antennæ, two smaller ones between the eyes, also by a very distinct neck which connects it with the thorax; the labrum is large, transverse and entire, with the angles rounded off and the base narrowed; the mentum is but slightly transversely emarginated, edentate; the ligula is truncated at the tip, the paraglossæ adhere to it, reach a little beyond it, and are obtuse at the apex; the palpi are rather long with the last joint elliptic, acuminate; the antennæ are strong, filiform, and reach beyond the shoulders, joints 5-10 are of equal length and cylindric, 4-11 are pilose. The most remarkable part of the insect is, however, the thorax, which is of a subrhomboidal shape, transverse, smaller than the head, as broad again as long; it has two strong lateral angles at the middle, each furnished with a strong bristle, the anterior part has the sides rounded, the posterior abruptly obliquely contracted, at the base it is cylindric. As a specific distinction of the thorax, I mention, moreover, that in the present species it is impressed with two deep punctures before the middle and that it is rugose at the case. The abdomen is slightly peduncled. The scutellum is slightly excavated. The elytra are oval, rather convex and impressed with rows of punctures. The legs are simple and weak, apparently equal in both sexes. The anterior tarsi are little stouter than the rest, but not dilated nor furnished with any additional clothing below; the anterior tibiæ are deeply notched. As to the colour: the head and wing covers are black, the latter with the suture and margin of a light brown and highly polished, the thorax is reddish, and the legs are whitish. The insect

is very agile, and ever ready to take to its wings. It is of quite a peculiar appearance, imparted to it by its large eyes, small curiously shaped thorax and rather plump elytra and abdomen. I may further mention, that I have observed the fourth joint of the maxillary palpi to collapse when the specimens become quite dry, so as to give them a different, spoon-like appearance, apt to mislead any one who has not examined fresh specimens.

#### 10. TEROHOPTERYX CURSITANS. *N.*

*T. ovata*, subconvexa, pubescens, supra obscure senea, elytris seneo-brunneis, subtus picea, pedibus oreque testaceis, antennis art. 3-11 nigrescentibus. Long. corp. 2/5 lin.

Antennarum clava art. 2 primis ovatis, ultimo conico, acuminato. Thorax amplissimus, elytris tertiâ parte minor, convexus, angulis acutis, basi humeros amplexans, apice angustatus. Elytra subdepressa, subquadrata, apicem versus parum angustata, truncata, abdomine multo breviora. Tibiæ medie incrassatæ. Coxæ posticæ maxime dilatatæ. Mesosternum carinatum.

Sub veget. putrescent. exsicciscentibus in prov. occid. copiosa.

A rather large species, commonly met with in this part of the Island, under rotting vegetable substances somewhat dried up. It is very agile and ready to take to its wings, which are of the beautiful typical construction, about twice the length of the body, and in dead specimens frequently produced behind. These insects vary a little as to shape, some being more narrowed behind than others, and also as to the exact number of the abdominal segments left uncovered by the elytra, generally three or four. The head is large, but exhibits nothing abnormal or extraordinary; the thorax is very large, emarginated in front and behind, with the angles acute, the basal ones enveloping the shoulders; the wing-covers are subquadratic, with the angles rounded off and a little narrowed behind; the legs have the tibiæ incrassated in the middle, and the posterior coxæ very much dilated and distant from each other; in all other respects they are typical. The shape of the body is that of an egg, broadest at the shoulders, gently narrowed towards the apex of the abdomen, and rounded off towards the head.



11. TRICHOPTERYX IMMATURA. *N.*

*T. præcedenti similis, differt tamen colore supra æneo-testacea, subtus testacea, antennarum ast. 3-11 nigrescentibus; differt etiam corpore robustiore, magis quadrato, capite paulo majore, thorace minus convexo, partum ampliore, elytris abdomen totum vel fere totum obtegent. Pedes, antennæ etc. omnino præcedentis. Long. corp.  $\frac{1}{2}$  lin.*

In præcedentis societate specimina nonnulla legi.

Of somewhat the appearance of an immature individual of the former, but sufficiently distinct to be formed into a new species. The insect is altogether of a different appearance, imparted to it by the greater general plumpness of the body, the larger head, the less convex, but at the same time possibly still ampler, thorax, the altogether more quadratic shape, etc. The remark regarding the exact number of abdominal segments, left uncovered by the elytra, applies to this and all other species as well. The present one has generally the last two segments uncovered.

12. TRICHOPTERYX INVISIBILIS. *N.*

*T. ovata, subdepressa, subparallela, pilosa, supra obscure ænea, subtus picea, pedibus, abdomine, antennis oreque testaceis. Long. corp. vix  $\frac{1}{5}$  lin.*

Thorax amplus, elytris sesqui minor, convexus, angulis posticis humeros vix superantibus. Elytra oblonge quadrata, angulis rotundatis, subdepressa, truncata, abdomen totum vel fere totum obtegentia. Coxæ posticæ approximatae. Tarsi typicis minus elongati, art 3<sup>o</sup> præcedentibus haud multo longiore.

Cum *T. cursitante* victitat; frequenter legi.

A very pretty and very distinguished species. Its most striking peculiarity consists in the posterior coxæ, which are little distant from each other as those of the anterior legs, and almost touch each other, and also in the shortness of the tarsi. The head with the antennæ, the mesosternum, the tibiæ, which are incrassated in the middle, the posterior coxæ, with regard to the enlargement, are quite typical. However, the thorax and elytra differ again from those of *T. cursitans*, (which in every respect may be looked upon as the typical representative of the family in Ceylon, and which is here referred to as such) the former by the shortness of the posterior

angles, which can hardly be said to envelope the shoulders, the elytra, by being less or not at all narrowed behind, giving an oblong rather than an oval shape to the insect. Although in length only about one-half shorter, it is in bulk certainly one-fourth smaller than *T. cursitans*, and, although probably the smallest Ceylon beetle, it is distinguished at first sight.

### 13. PTILIIUM SUBQUADRATUM. N.

*P. subquadratum*, subconvexum, pilosum, obscure æneo-testaceum, thorace dilutiore. Long. corp.  $\frac{1}{4}$  lin.

Caput mediocre. Antennarum clava art. 1<sup>o</sup> inverte conico, 2<sup>o</sup> subcylindrico, ultimo elongato-ovato. Thorax convexus, angulis basalibus humeros fortissime amplexantibus, apicem versus valde rotundatus, apice leviter sinuatus. Elytra quadrata, abdomen non totum obtegentia. Scutellum parvum. Pedes robusti tibiis apicem versus incrassatis, tarsis art. 3<sup>o</sup> primi secundique longitudine, his subbilobis subtus penicillatis, coxis posticis simplicibus distantibus. Mesosternum non carinatum.

Ubi præcedentes sed infrequenter occurrit

The g *Ptilium* is the repository for all the anomalies of the family, its characteristics therefore are very vague; but if the absence of the mesosternal carina and the simplicity of the posterior coxæ are the determining features amongst them, the present species, in spite of a variety of anomalies it exhibits in other respects, belongs to it. The head is of middling size; the antennæ robust with the first joint of the club of the shape of an inverted cone, the second rather cylindrical, narrowed at the base, and the last elongate, ovate. The thorax is of very different structure from that of the foregoing species of the family, the basal angles being unusually far produced beyond the shoulders; towards the head it is strongly and rapidly rounded off, being thus altogether of a semi-circular shape; at the apex it is merely slightly sinuated, and the head is inserted rather below than in this sinuosity; the whole thorax moreover is very convex, whilst the elytra are depressed. The wings vary from the typical form by being fringed with short simple cilia, instead of those long feathery appendages; they are moreover without a distinct peduncle, but still folded in the manner characteristic of the family. The legs are stout

with the tibiæ thickest at the tip ; the third tarsal joint is of the length of the preceding two ; the latter are somewhat bilobed and hairy below. The posterior coxæ are simple and distant. The mesosternum without a carina. The whole shape of the insect is quadratic rather than otherwise.

#### 14. PTENIDIUM MACROCEPHALUM. *N.*

*P. ellipticum*, subconvexum, nitidum, sparsim pilosum, supra piceo-æneum, subtus piceum pedibus oreque testaceis. Long. corp.  $\frac{1}{2}$  lin.

Caput maximum. Antennarum clava elongata articulis ellipticis. Thorax subquadratus antice posticeque angustatus, basi punctis 4 magnis profunde impressus. Elytra ovata, medium versus leviter inflata, apice obtuse acuminata, abdomine longiora et ampliora, punctulis lineis dispositis obsoletissimis impressa. Alæ corpore plus duplo longiores. Tibiæ fortiores spinulosæ. Tarsi breviores. Prosternum carinatum.

In præcedentium societate frequenter lectum.

This is perhaps the prettiest of the five species of the family just described, and at first sight recognised by the shape of its body and the polished back. The head is very large. The thorax is narrowed in front and behind, at the latter place impressed with four deep not to be overlooked punctures. The wing-covers are oval, a little inflated about the middle, rounded at the apex, and longer and wider than the abdomen. The prosternum is carinated.

It affords me much gratification to be enabled to publish representatives of three genera of this highly interesting and probably very extensive and widely-distributed family of pygmies, the South Asiatic representatives of which have hitherto been entirely unknown. I have no doubt that even this Island is the abode of a great many more species.

#### 15. STENUS BARBATUS. *N.*

*S. elongatus*, æneo-niger, nitidus, punctatus, sparsim pubescens, pedibus palpisque albidis, ore coxisque testaceis, antennis brunnescentibus. Long. corp.  $2\frac{1}{2}$  lin.

Caput thorace tertiâ parte latius, fronte costis 3 abbreviatis, antice vido-pubescens. Antennæ art. 3<sup>o</sup> sequentium 2 fere longitudine, 3 imis elongatis, ellipticis. Palpi max. elongati apice densius pubescentes. Thorax cylindricus medio leviter incrassatus, basi subquadratus.

*Elytra thorace paulo longiora, sed fere duplo latiora, convexa. ovata. Abdomen immarginatum. Pedes elongati tennes, tibiis apice tarsisque fortiter setosis, his art. 4<sup>o</sup> profunde bilobo.*

*In lacus Colomb. ripis specimina nonnulla legi.*

This as well as the following species belongs to Erichson's division II. B. of the g., both having the abdomen immarginate and the fourth tarsal joint bilobed. Everything about this species is elongated. The head is about one-third broader than the thorax, the forehead is slightly excavated with two elevated ridges running from the root of the antennæ a short distance upwards, a third runs from the crown of the head down towards the centre of the two former, but all three reach only about the middle of the head. The part below the antennæ is covered with white hair. The antennæ have the third joint much elongated and the terminal club composed of elliptic joints. The thorax is rather slender, incrassated at the middle, gradually narrowed in front but nearly quadratic behind. The elytra are longer than the thorax, about double its breadth and oval, being slightly narrowed at the shoulders and the apex. The legs are long and slender, hairy at the apex of the tibiæ and the tarsi, the latter very much so on the inner side. The insect is of a metallic black color, highly polished; the legs, palpi and the first two antennal joints are whitish, the tibiæ and the apex of the palpi being, however rather darker, joints 3-11 of the antennæ are brownish, the coxæ and the mouth are yellowish, the tarsi have a brown spot at the apex of the first three joints, the claws are black. The insect is punctured all over, but the abdomen, the apical segments of which are indeed nearly smooth, less so than the rest of the body, and sparingly covered with small white hairs.

#### 16. STENUS LACERTOIDES. N.

*S. robustus, nigro-æneus, dense profundeque punctatus, subtus sparsissime pubescens, pedibus palpisque testaceis femoribus apice nigrescentibus, antennis oreque castaneis. Long corp 1½ lin.*

*Caput thorace quartâ parte latius, fronte 2. costata. Antennæ robustæ art. 3<sup>o</sup> quarto paulo longiore, 9-10 globosis, 11<sup>o</sup> conico. Thorax cylindricus, medio fortius incrassatus, latitudine quartâ parte longior, margine*

antere elevato, basi subquadratus. Elytra thorace longiora, convexa, humeris prominentibus. Abdomen immarginatum. Tarsi art. 4<sup>o</sup> profunde bilobo.

In prov. occid. stagnorum ripis rarius occurrit.

About this species everything is robust. It is well distinguished by the rounded club-joints of the antennæ, the elevated anterior margin of the thorax, the prominent shoulders, and its general shortness and plumpness. The forehead is rather more depressed or excavated than in the former, the two antennal ridges are shorter, the vertical one is altogether obsolete. The palpi are robust. The third antennal joint is about one third longer than the fourth. The thorax is shorter and plumper than in the former. The elytra are less oval, having the shoulders more prominent and only the apex rounded off or narrowed. The legs are similar to those of the former, but more robust, less hairy, and have the tarsi more cylindric. The insect is of a blackish metal color, the legs and palpi are yellowish, the tibiæ, however, the apex of the palpi, and also joints 1-2 of the antennæ rather darker; the femora are blackish towards the end, the mouth and joints 3-11 of the antennæ are chestnut, and the coxæ pitch-color. The animal is densely and deeply punctured all over, very sparingly covered with small greyish hairs, nearly obsolete on the back but more distinct below. It is less highly polished than the former.

#### 17. *ANTHICUS QUISQUILIARIUS*.\* N.

A. castaneus, capite, abdomine elytris que piceis, his fascia media transversali interrupta maculisque 6 humeralibus niveis, parce pilosus. Long. corp. 1½ lin.

Caput globosum, supra subtusque profundo punctatum, oculis parvis. Thorax nodoso-pyriformis, infra medium constrictus, parte anteriore crassiore lin. long. med. profunde divisa, subcordiformi. Elytra elliptica.

Sub veget. putrescent. vicitat, prope Colombo rarius legi.

---

\* *A formicarius*, of the first edition. I have changed the name, as I have since perceived that it has been already used by Laferté.

This insect looks uncommonly like an ant. It is easily distinguished from all other species of the Island, partly by this resemblance, partly by the sculpture of the thorax and the white fascia across the elytra. The antennæ are robust, thickened towards the tip, the three last joints forming a club. The legs have the femora very much incrassated, the tibiæ at the apex bicalcarate, and the tarsi, especially of the anterior pair, very hairy below, the fourth joint appears to be slightly cordiform. The white marks of the shoulders and the fascia across the wing-covers are composed of white hairs, the former are rather an interrupted row of these than true maculæ, the fascia consists of two halves, one in either elytron, reaching neither the external margin nor the suture. The insect is of slow motion.

#### 18. ANTEIGUS INSULANUS. N.

*A. testaceus*, abdomine obscuriore, capite thoraceque rufo-testaceis, elytris fasciis 2 nigris, parce pilosus. Long. corp.  $1\frac{1}{4}$ - $1\frac{1}{2}$  lin.

Caput globosum oculis mediocribus. Thorax pyriformis, cum capite supra punctata. Elytra ovata. Tarsi art. 4<sup>o</sup> bilobo

Prope Negombo in pratibus sat copiosus.

In some of the specimens before me the anterior femora are furnished with a strong thorn inside, having at the same time the tibiæ of the same pair of legs slightly emarginated inside near the apex.

#### 19. MELIGETHES ORIENTALIS. N.

*M. ovatus*, subconvexus, pilosus, supra nigro-aeneus, subtus piceus, pedibus, antennis palpisque maxill. dilutioribus, tarsis palpisque labial. brunneo-aureis. Long. corp.  $1-1\frac{1}{2}$  lin.

Mentum transversum planum, punctatum, lobis apice depressis excavatis, glabris obtusis. Palpi lab. art. ultimo inflato, ovato; maxill. art. ultimo apice angustato levissime truncato. Mandibulæ uni dentatæ. Thorax amplius angulis acutis, antice emarginatus, postice pluries sinuatus, subtus punctatus. Elytra ovato-quadrata, angulis 4 apicalibus rotundatis, pygidium hard obtegentia. Pedes validi, femoribus tibiisque incrassatis; anteriores tibiis apice intus unispinosi, tarsis art. 1-3 fortiter dilatatis, 1-2 subæqualibus transversis, profunde reniformibus, 3<sup>o</sup> minore, cordato, 4<sup>o</sup> minimo, subcylindrico; intermed. et post

tibiis extus spinulosis, tarsis anterioribus similibus sed art. 1-3 minus dilatatis, cordiformibus. Prosternum marginatum, punctatum, obtuse, acuminatum. Mesosternum antice carinatum.

Variat magnitudine et colore æneo-brunnea.

Prope Colombo in floribus per occasionem frequentissime legi.

Of the usual shape and color, but larger than usual,—varying, however, in this respect, some individuals being fully one-third smaller than others. Those small individuals, which occur in the proportion of about 2 to 20, are, moreover, nearly always of a brownish metal color instead of a blackish green. I have been unable to discover any other distinctions. This difference in size is no criterion as to the sex. The insect appears of local occurrence or attached to certain plants, which is nearly the same. I find them in abundance in the blossoms of *Convolvulaceous* and *Apocynaceous* plants in my garden, which is situated on the west bank of the lake. The species appears to differ from the typical *Meligethes* in the following points: the structure of the mentum, which I have sufficiently described above, the last joint of the lab. palpi, which in this case is not truncated, and the first of the antennæ, which is externally incrassated as in *Epuræa*. The antennæ are otherwise robust, the club is firm and hairy. The thorax is very ample, thinly ciliated along the upper part of the anterior margin, rather strongly below. The prosternum is largely developed, marginated, punctured and obtusely acuminated, overlapping the anterior part of the mesosternum which (the anterior part) is cylindrical and carinated. Joints 1-3 of the tarsi are strongly penicillated below, the penicilla being composed of glanduliferous hairs of a fine golden color.

## 20. GEORYSSUS GEMMA. N.

*G. pygmæi* staturâ et magnitudine, supra purpureo æneus, iridescens, subtus piceus; *alatus*. Thorax subsemiorbicularis infra apicem constrictus, sulco med. long. divisus, lateribus, basi apiceque excavatus, impressionibus 3 majoribus dorsalibus, 2 minoribus lateralibus. Elytra fortissime costata, costis obtusè dentatis, in interstitiis transversim punctato-impressa, ad humeros profunde excavata, infra medium leviter sinuata. Tibiæ extus spinulosæ, intus sparsim ciliatæ.

Prope Negombo in ripis Mahæ-Oyæ fluvii non infrequenter et per occasionem nocti ad lumen cepi

Lacordaire and others characterize the g. *Georyssus* as having the elytra soldered together and being destitute of wings. *In the present species, however, the elytra are unconnected and cover wings proportionately larger than in any other beetle I can at present think of.* They are elongated and comparatively narrow, resembling in shape very much those of a *Libellula*, have a few veins at the base, and are ciliated at the margin. I have moreover occasionally taken this insect *flying* about the light at night. The sculpture of the thorax is complicated and difficult to describe. However, the leading features in it are these: a subapical sinuosity on either side; a longitudinal furrow; excavated sides, base and apex; three larger dorsal depressions (one central, two obliquely basal) and two smaller lateral ones at the subapical sinuosities—a short elevated ridge at the centre of the base separating the two basal impressions and being itself divided by the longitudinal furrow; two elevations separating the anterior part of the basal impressions from that of the central one (at the middle these three depressions are connected); two small rugosities near the anterior margin, one on either side of the longitudinal furrow.

The sculpture of the elytra is less complicated. They have a deep cavity at the shoulder, a large but not deep sinuosity below the middle, and are obtusely acuminate. The costæ of the back are 11 in number, the suture lying in the central one. The half of this central costa and the exterior margin form an elevated border round either elytron. The first and second on either side run towards the apex, but come to a stop (very abrupt in most, but less so in some specimens) before reaching it; the third, after having been interrupted near its base by the subhumeral cavity, runs on but does not reach as far as the former; the fourth does not leave the region of the shoulder; the last on either side is very prominent at the base, but soon forms an abrupt declivity and runs on as a low ridge to below the middle. The back of all these costæ is obtusely dentated. The interstices are marked with large, shallow,



transverse impressions. The head of the insect is rather large and even. The mandibles are furnished with an obtuse sub-apical teeth, the two lower thirds are ciliated. The maxillæ have the apex of the outer lobe externally enlarged, rounded off, and furnished with three strong teeth replaced by cilia on the inside; the inner lobe is conic and similarly provided with teeth and cilia, however, much thinner and finer. The maxill. palpi are robust, the last joint is inflated at the base. The antennal club is hairy, dark (whilst the remaining joints are yellowish), conic, and somewhat securiform, the sixth joint being inserted on one side of the seventh. The legs are robust, the tibiæ slightly curved, obliquely truncated at the end, furnished with spines along the outside, and with distant cilia along the inner.

## 21. HYDROCHUS LACUSTRIS. N.

*H. elongatus*, subdepressus, supra metallicus, iridescens, subtus piceus, pedibus, antennis, palpis elytrorumque margine magis minusve brunneis, mento cyaneo. Long. corp. 1-1½ lin.

Palpi maxill. robusti art. ultimo elliptico leviter inflato. Mandibulæ apice bifidæ. Antennarum clava dense pilosa. Thorax oblonge quadratus basin versus angustatus, basi medio productus, cum capite profunde punctata. Elytra ad humeros oblique truncata, apicem versus sat fortiter angustata, profunde striato punctata. Tibiæ extus spinulosæ,

Specimina nonnulla in locu Colomb. legi.

The head is robust, broader than the thorax, the eyes large and prominent. The femora, the last joint of the maxill. palpi, the mandibles, and the tarsal joints are dark towards the apex.

## 22. HYDROCHUS RUFIVENTRIS. N.

*H. ovatus*, convexus, supra oleagino-niger, subtus obscure ferrugineus, pedibus dilute piceis, labro aeneo, reliquis oris partibus cum clypeo testaceis. Long. corp. 9 lin.

Palpi maxill. articulis apicem versus abruptius incrassatis, art. 3<sup>o</sup> quarto sesqui longiore. Antennæ art. 7-8 fortiter perfoliatis, ultimo acuminato. Caput antice utrinque punctulorum serie subsemicirculari et ad oculorum marginem interiorem impressum. Thorax punctulorum seriebus 4 lateralibus, 2 subapicalibus obliquis abbreviatis signatus. Elytra subtiliter striato-punctata. Tarsi omnes unguibus basi fortiter unidentatis. Carina prosternalis cultriformis.

Specimen singulum f. nocte ad lumen cepi.

As far as my resources allow me to ascertain, a very anomalous species, having the perfoliated antennæ and toothed claws of a *Hydrophilus* and the cultriform prosternal carina and the elytra of a *Hydrous*. I have placed it in the latter g. on account of the sharp edge of the prosternal carina, in which the great distinguishing character of this g. seems to lie, the same being deeply grooved in *Hydrophilus*. The insect attracts attention at once by the reddish color of its abdomen. It is of a blackish olive color on the back, having, however, the clypeus and the anterior margin of the labrum of a yellowish brown, the latter being otherwise of rather a metallic color. The remaining parts of the mouth are more or less yellowish. Joints 1-6 of the antennæ are yellowish too, with the exception of the second which is dark: joints 7-9 are blackish and pubescent. The legs are of a light pitch color. The lower part of the head is impressed with two rather semicircular series of punctures, similar punctures occurring along the internal margin of the eyes. The thorax is marked with six series of them and on the elytra they are arranged in lines. The sternal carina is well developed, the prosternal part has a sharp edge, whilst the mesosternal one is obtuse on the back, and the metasternal part depressed and slightly grooved.

### 23. HYDROUS INCONSPICUUS. N.

H. præcedente minus convexus, supra oleagino-niger, subtus rufopiceus, ore testaceo. Long. corp.  $4\frac{1}{2}$  lin.

Palpi maxill. art. 2<sup>o</sup> et 4<sup>o</sup> subcylindricis, 3<sup>o</sup> apicem versus sensim incrassato, sequente tertiâ parte longiore. Antennæ art. 7-8 sub-globosis, 9<sup>o</sup> magno, ovato. Caput, thorax et elytra, ut in præcedente sculpta et signata.

In lacu Colomb. mens. Jun. non infrequenter cepi.

This is in every respect a normal species. The prosternal carina has a sharp edge, the claws are simple, the antennal club is composed of rounded joints, the elytra are of the typical structure, &c. In the latter respect as well as with regard to the various series of punctures upon head, thorax and elytra, it resembles the former; the punctures of the elytra are, however, less distinct. Joints 1-6 of the antennæ are yellowish,

the club being dark and finely pubescent. The maxill. palpi have joints 2 and 4 subcylindric, but the intermediate one thickened towards the tip.

I have not seldom in the month of June taken the pupæ of this species on the banks of the Colombo lake and hatched them at home. I found them about one inch under ground and often as far as 12 feet from the edge of the water, but still in muddy places. The imago is very active, perhaps more so than any other species of the g.

---

### No. III.

#### *General Remarks on the SCYDMENI.*

In the first number of these Papers, I have described a winged species of *Edichirus*, a g. supposed to be without organs of flight; in the second number I have given publicity to the more important discovery of wings in the single g. which forms the family of the *Georyssi*, also hitherto supposed to be apterous.

At present I am about to announce to some and to confirm to others the existence of these organs in the family of the *Scydmaenidæ*, a fact, although incomplete, of more importance than either of the former, considering the extent of the family and the difference of opinion, which appears to exist on the subject amongst the most eminent Entomological authorities. It is this importance which induces me to enter more fully on the subject.

I am not acquainted with the famous monograph of the family of the *Scydmaenidæ* by Dr. Schaum. From the manner, however, in which it is quoted by Lacordaire, in his g. *d. Col.* I should infer that these two celebrated authors agree in all the vital points. In Lacordaire's diagnosis of the family, these insects are described as having (with the exception of the American g. *Brathinus*, of which Lacordaire is not quite sure that it belongs to the family) the elytra soldered together, and being destitute of wings. Now, it is scarcely credible

that on a point so easily ascertained as this, any difference of opinion should exist; still, Westwood, in his "Modern Classification of Insects," in describing the same family, makes statements which imply the contrary. However, Lacordaire's description, being by 15 years,—more in fact,—the most recent, is, from this reason alone, entitled to be considered before all others; and, looking upon it in this light, that is, as the essence of all former observations, I shall, for the present, occupy myself with it alone.

According to this description, as mentioned above, the insects which it regards *have the elytra soldered together, and are destitute of wings*. This being the case, I was startled to find that, out of the thirteen species described below, nine or ten which I examined in this respect, had neither the elytra soldered, nor were they destitute of wings—*on the contrary the elytra were unconnected in the middle, and the wings were nearly double the size of the whole insect and could not possibly be overlooked*. I would willingly suppose that the 100 species of this family contained in European collections, and principally derived from Europe and North America, agreed with Lacordaire's description, and that the Ceylon species were exceptions to the general rule, had not Westwood's observation, alluded to above, corroborated my own, thus rendering me suspicious of some unaccountable mistake or oversight somewhere or other. That this mistake cannot consist in a slip of the pen, or a misprint in the *g. des Coléoptères* quoted above, is clear from the obvious care which has in every respect been bestowed upon this work, and from the same remarks being repeated in different words.

Where then this mistake is,—upon what ground it rests—it would, under my circumstances, be useless to attempt to unravel. However, it appears certain to me that some more detailed and positive remarks on the subject cannot be superfluous, and must be new to some entomologists.

Placing the fullest confidence, as every one would do without hesitation, in the infallibility of the description of the Belgian author, it was not likely that I should have looked for wings

at all in the *Seydmanidae* (a family to which I have not, until lately, paid much attention) had I not been struck by seeing the elytra of my *S. alatus* open, when handling it with a fine painter's brush in a drop of water, it being at the time quite out of the question that the opening could have been effected by pressure. On opening the elytra fully, I had no difficulty in discovering the wings.

Rendered extremely curious by this discovery—diametrically opposed to the distinct statement of so great an authority as the one just alluded to—I now examined other species, and all with the same result, most of them opening the elytra without my assistance, in the same manner as *S. alatus*; and I have not the slightest doubt that, when a sufficient number of specimens will enable me to examine the rest, it will still be with the same result.

That these insects use their organs of flight may be gathered from the following. At a former period, I lived in a house situated on a small eminence and overlooking extensive groves of cocoanut trees, cinnamon gardens, paddy fields, and patches of jungle. Here I collected large numbers of *Pselaphidae*, especially *Euplectus*, in thin, scarcely visible, spider webs, with which the white walls of the house were covered in certain places—thus forming one large trap for anything small flying about. That these had been caught here when on the wing there can be no doubt; but I was much surprised to find with them (what is so common in more congenial localities, here also,) a considerable number of *Seydmani*, especially my *S. advolans* and *pubescens*, as they were said by the most recent authority to be unable to fly, and the position they then found themselves in, was one they could not well, or would not possibly, have got into otherwise than by flying. From some reason or other, I am ashamed to say, I did not follow up the matter at the time; but I am now certain on the subject. Indeed, to remove all doubt and to settle all disputes, I have just been so fortunate as to take my *S. advolans* actually on the wing, flying in my garden in the evening at sunset.

Having gone so far, I will (in spite of some slight misgivings of being laughed at for telling an old story with so grave a face) add a few descriptive words about the organs in question. The wings of my *Scydmaeni* are ample, about double the size of the whole insect, oblong, having the margin beautifully ciliated, and, with the exception of a few yellowish veins at the base, without any visible organs of this kind.

In spite of the difference in their shape, etc., I believe the species described below to be all genuine *Scydmaeni* as restricted at present. Being, however, unacquainted with the sexual distinctions of these insects (which indeed I believe not to have been satisfactorily pointed out by any one, and to differ in different species), I should not be surprised if one or two of my species were eventually ascertained to have been separated upon these grounds alone. However, having been very reluctant in the admission of new species, it is just as likely that individuals may hereafter be found united in one which ought to be separated into two species. But I trust that neither may happen.

The species were all collected by myself in the immediate neighbourhood of Colombo. I have, however, no doubt that they occur all over the S. W. of the Island, which is of a uniform physical character, and perhaps occupy a still larger portion of it. Indeed, I have taken the *S. pselaphoides* in the hills, at an elevation of 3,500 feet, under the bark of trees. None of them are quite common; on the contrary, of nearly half of them I possess only one or two specimens. My *S. femoralis* I found under the soft, rotting bark of an *Brythrina Indica*: *S. Ceylanicus* and *ovatus*, I found dead in spiderwebs: *S. graminicola*, *glanduliferus* and *pyriformis*, I have hitherto exclusively taken in the sweeping net on the lawns of my garden about sunset: the other species I have met with indiscriminately in spiderwebs, under rotting vegetable substances, and in the grass.

After this preamble, which I trust may not be deemed quite superfluous, I now enter upon the description of my species, drawing previously attention to the three very natural and

very distinct groups which they form, and the characteristics of which will at once be perceptible from the headings given below.

With regard to the first group (A. i. spec. 24-28) I may mention that the elongated legs, largely developed posterior trochanters, and often distinct posterior coxæ, render the motions of the insects belonging to it staggering when walking, which together with their oblong, subdepressed body distinguishes them at a glance. I have subdivided them from the cultriform or grooved mesosternal carina.

The second group (A. ii. spec. 29-35) is equally well characterized as the former by the more robust, pyriform and subconvex body of the insects. *S. pselaphoides* in the former and *S. advolans* in the present group, form connecting links between the two; especially *S. pselaphoides*, which in general appearance rather belongs to the second, upon closer examination, however, is easily ascertained to be an anomalous member of the former.

From the rounded or narrowed occiput I have divided the second group into two subdivisions, giving preference to the distinctions to be drawn from this part of the body to those to be derived from the thorax, which from the variety of shapes it assumes would naturally suggest itself for that purpose; but the gradations between the principal forms appear to me too many, five, and therefore too indistinct to adopt them.

As to the third group (B. spec. 36) the insect which alone forms it amongst those described below, is so different from any of the others that its peculiarities must strike any one at first sight.

#### A.

*Species with a thick neck, abruptly formed and immersed in the thorax.*

##### i.

*Fourth joint of the maxill. palpi not acuminate; head sub-quadrato-ovate; eyes middling or small, finely granulated,*

*little or not at all prominent; antennæ subapproximate at the base; posterior trochanters elongated, incrassated at the apex; thorax obovate; body elongate, subdepressed.*

(a.)

*Mesosternal carina slight, simple.*

#### 24. SCYDMÆNUS ALATUS. N.

8. dilute brunneus, pedibus antennisque dilutioribus, tarsis palpisque testaceis; pubescens. Long. corp.  $\frac{3}{4}$  lin.

Antennæ art. 1<sup>o</sup> apice bi-acuminato, 3-4 subæqualibus, 5 præcedente majore, 6 longitudine inter 4 et 5, ovato, 7-8 subæqualibus, 9 majore. 7-9 apice angustatis, tubiformibus, 10-11 ovatis, clavam formantibus, vel art. 9 globoso, 9-11 clavam formantibus. Palpi maxill. art. ultimo minimo apice truncato. Mandibulæ dente bifido munitæ, basi fortiter abrupteque dilatatæ. Thorax foveis basalibus nullis. Pedes elongati.

I include in this species individuals with a two, and others with a three, jointed antennal club. The latter are further distinguished by having a slight sinuosity in the rounded outline of the basal angles of the thorax: by having the posterior part of the metathorax and the base of the abdomen sensibly incrassated: and the head rather less quadratic than the former. However, the individuals thus distinguished being in all other respects exactly like those with the two-jointed club, I cannot help looking upon all these distinctions as sexual ones and uniting the insects in the same species.

The head from the eyes to the neck is of a transverse sub-quadratic form merging into the oval by the angles being rounded off; the anterior part is narrowed. And this is the typical sculpture of the skull in all the five species of this group. The eyes in the present species are middling. The antennæ are rather approximated at the base, and inserted in the centre of the front under a ridge which runs across it from eye to eye. The first joint is biacuminated at the apex: the fifth is longer than the adjoining ones: joints 7-9 in the individuals with the two-jointed and 7-8 in those with the three-jointed club, are of a peculiar construction, being narrowed at the apex and fitting into each other like the tubes of



a spyglass. The club joints are ovate, flat at the base; the last is large and obtusely acuminate. I consider the principal distinguishing character to lie in the remarkable structure of joints 7-9 of the antennæ. The maxill. palpi have joint 2 rather strongly incrassated at the apex, joint 3 obovate, narrowed at the base, joint 4 very minute, truncated at the apex. The mandibles are furnished with a bifid tooth and are strongly and abruptly dilated at the base. The thorax is of an obovate or obcordato-ovate form, being rather strongly rounded off before the middle and gradually narrowed below it; the usual basal impressions are wanting, the posterior margin has two slight sinuosities, the posterior angles are rounded off or obliquely truncated. Scutellum obsolete. Elytra furnished with a very short elevated ridge at the shoulder. Legs elongated; coxæ large, the two posterior ones rather distant from each other; two posterior trochanters much elongated, incrassated at the tip; apex of tibiæ subcylindric, but not narrowed, and hairy, especially in the 2nd pair; joints 2-3 of the tarsi of equal size, the first longer, the 4th a little shorter; two anterior tarsi slightly contracted, 2nd and 3rd pair more and more elongated. Penultimate segment of abdomen with strong longitudinal groove on the back.

## 25. SCYDMÆNUS FEMORALIS. N.

*S. staturâ et magnitudine præcedentis; testaceus. Antennæ art. 3-4 subæqualibus, 5 præcedente longiore, 6-6 gradatim minoribus, subglobosis, 7-8 apice fortius oblique truncatis, 9-11 gradatim majoribus, subglobosis, clavam formantibus. Palpi maxill. art. ultimo minime semigloboso. Thorax magnus obovatus, basi rotundatus, 4 foveolatus. Elytra apice truncata, 2-sinuata. Pedes femoribus 2 posticis medio constrictis.*

Of the general appearance of the former, but of a light yellowish colour, and well distinguished by the large thorax, truncated elytra, and abnormal construction of the 2 posterior femora. Antennæ with joints 7-8 rather strongly obliquely truncated at the apex, 9-11 forming a club, subglobose, flat at the base, the last acuminate and slightly cut away or even excavated on the inside of the apex. Last joint of

maxill. palpi semiglobose, these otherwise the same as in the former. Thorax and elytra of *S. alatus*; the former, however, larger, rounded at the posterior margin, and with four basal impressions, the later slightly truncated at the apex and with slight sinuosity in the truncature on either side of the suture. Scutellum very small. Legs with the tibiæ slightly bent at the base, the apex as in the former; tarsi with joints 1-4 gradually decreasing in size, first pair contracted and furnished with brushes on the inside. The two posterior legs inserted rather distant from each other, the basal part of abnormal construction; the trochanters much elongated and incrassated at the tip, whilst the femora at the place of the juncture rather abruptly narrowed, bent, and slightly compressed,—they being, at the same time, thinner than the adjoining apex of the trochanter; the constriction very striking.

## 26. SCYDMÆNUS CEYLANICUS. *N.*

*S. alati* colore, sed major et magis depressus; long. corp.  $\frac{3}{4}$  lin. Caput magnum, robustum, thoracis latitudine. Antennæ basi non approximatæ, art. 3-4 et 5-7 inter se subæqualibus, arcum formantibus, 8-10 gradatim majoribus, subgloboosis, depressis apice oblique truncatis, 11<sup>o</sup> magno, conico, 8-11 longius pilosis, clavam formantibus. Palpi maxill. art. 4<sup>o</sup> minimo, semiglobooso. Thorax ovatus, foveis basalibus nullis. Elytra apice singulatim rotundata. Pedes validi tarsis 2 ant. art. 1<sup>o</sup> *subtus in spinam sat fortem producto*

An anomalous species, especially with regard to the antennæ which are much less approximated at the base than those of the rest of the species belonging to this group, and with regard to the two posterior coxæ, which, on the contrary, are more approximated than in any of the species just referred to. The insect is of the light brown color of the two former, but larger and more depressed. The head is strikingly large and heavy, of the width of the thorax, in its hind part, which is strongly transverse, the oval form is prevailing over that of the square. Eyes small. Antennæ inserted under two strong protuberances rather than under a ridge, their club four jointed, joints 3-7 forming an inwards-bent section of a circle, joints 8-10

strongly compressed, obliquely truncated (subperfoliated), 11 large, conic. The 3rd joint of the maxill. palpi is of an oblongo-ovato shape, the external basal angle is prolonged into a small peduncle inserted in the apex of the 2nd joint, the 4th joint, (about the semiglobose shape of which I am not quite satisfied), appears to be obliquely inserted in the tip of the preceding. Thorax oval, of a similar shape to that of the former, anterior margin slightly emarginated. Scutellum obsolete. Elytra with the traces of a humeral costa, separately rounded off at the apex. Legs strong, 2 posterior coxæ not more distant from each other than the 4 anterior ones; tibiæ elongated, bent at the base and apex, at the latter place slightly narrowed, subcylindric and hairy; tarsi with joints 1-4 subequal, in the first pair strongly contracted, joint 1 of this pair produced in a spine on the inside.

(b)

*Mesosternal carina middling, grooved.*

## 27. SCYDMÆNUS INTERMEDIUS. N.

*S. alati* statura sed major et robustior, colore obscuriore; long. corp.  $\frac{3}{4}$  lin.

Antennæ art. 1<sup>o</sup> apice bi-acuminato, 2 et 5, 3 et 4, 7 et 8 inter se subæqualibus, 6 quarto paulo minore, obovato, 7-8 subglobosis apice oblique truncatis, 9-11 gradatim majoribus, obovatis, clavam formantibus, 11 acuminato. Palpi maxill. art. 3<sup>o</sup> obovato, 4<sup>o</sup> minimo semi-globoso. Thorax subrotundatus, basi 4-foveolatus. Elytra apice singulatim rotundata. Mesosternum sat fortiter carinatum *carina dorso deplanata canaliculata, apice acuminata.*

This species stands in the middle between *S. alatus* and *pselaphoides*. To the former it is allied by its general appearance rather than by anything else, differing from it very much in the structure of the antennæ and the mesosternal carina. To the latter on the contrary it is allied by similarity in the structure of the said carina, differing, however, from it in general appearance. The color is that of *S. alatus*, but a shade or two darker, the insect being at the same time larger and altogether more robust. The eyes are small. Antennæ

club three-jointed, the joints forming it gradually increasing in size, obovate, flat at the base, the last acuminate. Scutellum obsolete. Elytra with two slight basal impressions, the trace of a humeral costa, separately rounded off at the apex. Legs elongated as usual; two posterior coxæ distant, tibiæ straight, subcylindric, but not narrowed at the apex, the four anterior ones hairy; tarsi with joints 1-4 almost imperceptibly decreasing in size—or perhaps 2-3 equal,—the anterior ones slightly contracted: these and the intermediate ones hairy on the inside. Mesosternal carina middling, flat on the back with a shallow but very distinct longitudinal groove or excavation, anterior part projecting, acuminate.

## 28. *SOYDMÆNUS PSELAPHOIDES*. *N.*

*S. subpyriformi-ovatus*, subconvexus, magis minusve brunneus, pedibus antennisque subtestaceis, femoribus apice nigrescentibus, tarsis palpisque testaceis; flavo-pubescent; long.  $1\frac{1}{2}$  lin.

Antennæ art. 1<sup>o</sup> mediocri, apice biacuminato, 2-4 sensim minoribus, 5 et 2, et 3, 7 et 10 inter se subæqualibus, 9-11 clavam formantibus, 6-11 basi transversim, 6-8 apice oblique truncatis, 7-8 compressis. 9-11 obovatis. Mandibulæ dente bifido munitæ, basi dilatæ et ciliatæ. Palpi maxill. art. 3<sup>o</sup> invertè conico, 4<sup>o</sup> minimo apice truncato. Thorax obovatus, latitudine quartâ parte longiore, basi 4 foveolatus. Elytra apice singulatim rotundata. Mesosternum præcedentis.

An anomalous species with regard to its general appearance which differs considerably from that of the rest of the group, and makes it, as I have remarked above, the connecting link between this and the following group. This is the largest species I have hitherto met with. The system of coloration is the usual one: more or less deep brown, legs and antennæ lighter, tarsi and palpi quite so. Eyes middling. Antennæ with a three-jointed club, the joints 6-8 are slightly truncated at the apex, 7 and 8 being at the same time strongly compressed have a subperfoliated appearance. The mandibles are furnished with a bifid tooth. The 3rd joint of the maxill. palpi is of the shape of an inverted cone, the 4th minute and truncated at the apex. The thorax is of an obovate form, about one quarter longer than broad, rounded off before and gradually narrowed below the middle, subquadratic at the base, impres-

sed with four foveæ or pits, the posterior angles rounded off. Scutellum minute. Elytra with two short humeral costæ, separately rounded off at the apex. Legs stout; two posterior coxæ distant; tibiæ slightly bent at the base, subcylindric at the apex, the four anterior ones hairy; tarsi with joints 1-4 gradually decreasing in size, the anterior ones dilated, the joints transversely triangular, the intermediate pair hairy on the inside. Mesosternum of the preceding. Metasternum with a slight longitudinal depression down the middle. Penultimate abdominal segment grooved on the back as in *S. alatus*. In the enlargement of the anterior tarsi lies, as in the other beetles, undoubtedly a sexual distinction, as it is not equally strong in all individuals.

I may mention here that upon some of the individuals I found ticks (some g. allied to *Ixodes* but not a *Gamasus*) fastened, one of them having made a wound such as, supposing it to be inflicted at a corresponding place and on a proportionate scale, few animals of a higher order, would, I think, have survived. Still this little beetle appeared perfectly at its ease. The parasite alluded to had fastened itself right in the centre of the forehead, and the wound it had inflicted in this,—one would imagine most dangerous place,—was a deep hole or pit with a callous border. The latter led me to infer that the injury was an old one, and the tick being at the time fastened in it (and this so firmly that I had some difficulty in detaching it), I felt sure it had been in this position for months. The injury was observable under a slight magnifier, and I think to compare it to one inflicted by a rifle-ball would be greatly underrating its importance.

## ii.

*Fourth joint of the maxill. palpi acuminate; mesosternal carina strongly developed; eyes large, prominent, coarsely granulated; antennæ distant at the base; 2 posterior trochanters simple; thorax variable; body robust, pyriform, sub-convex.*

## (a)

*Occiput rounded.*

30. SCYDMNÆUS ADVOLANS. *N.*

*S. long.* corp.  $\frac{3}{4}$  lin. Antennæ art. 3 et 4, 5 et 6 inter se subæqualibus, obovatis, 7 majore, subgloboso, 8-10 subglobosis, basi transversim, apice oblique truncatis cum 11° conico clavam formantibus. Palpi maxill. art. 3° elongato, inverte conico, 4° mediocri. Mandibulæ tenues, medio acuminate 1-dentatæ, basi abrupte dilatatæ. Thorax ovato-rotundatus, apice fortius angustatus, basi leviter 2-sinuatus, 5-foveolatus. Elytra apice singulatim rotundata.

The insect is of brown color, the antennæ lighter, the legs still more, and the tarsi and palpi quite so, the femora are dark towards the apex, the head, thorax and suture are occasionally of chestnut color. It is, as usual, pubescent. The sculpture of the head in this and the following species not, as in the preceding, based upon the oblong square or the oval, but rather upon the form of a ball, which, in a more or less compressed state, is always perceptible; in some instances it is narrowed on one side. In the present species the head is heavy and subglobose. The eyes are large, prominent and coarsely granulated. The antennæ are inserted distant from each other under two protuberances of the anterior part of the forehead. The club is 4-jointed, the joints composing it being flat at the base, and, with the exception of the last, obliquely cut away at the apex, the last itself being conic. The maxill. palpi have joint 3 rather elongated and of the form of an inverted cone, joint 4 middling, acuminate. The thorax is of a rounded oval shape and rather strongly narrowed towards the apex. The scutellum is obsolete. The elytra have the usual rudimentary costæ at the shoulders and are separately rounded off at the apex. The legs are middling, 2 posterior coxæ inserted close together, trochanters all simple, tibiæ slightly bent at the base, narrowed and subcylindric at the tip, the 4 anterior ones hairy, tarsi with joints 2-3 subequal, the first a little longer and the 4th shorter, the two anterior ones slightly contracted.

I include in this species some individuals which slightly differ from the foregoing description, being more robust, covered more densely and with longer hair, especially on the

occiput and thorax, with the latter rather obconico-ovate and the costæ of the elytra more distant, and moreover occasionally of a chestnut color.

### 30. SCYDMÆNUS PUBESCENS. N.

*S. præcedente gracilior; long. corp.  $\frac{3}{4}$  lin. Antennæ art. 3 et 4, 5 et 6 inter se subæqualibus subcylindricis, 7<sup>o</sup> secundo paulo minore, fortiter cylindrico, 8-10 subglobosis cum 11<sup>o</sup> conico clavam formantibus. Palpi maxill. art. 3<sup>o</sup> invertè conico, 4<sup>o</sup> minuto. Mandibulæ tenues, medio obtuse obsoleteque uni-dentatæ, basi abrupte dilatatæ. Thorax conicus, latitudine hand longior, basi 4-foveolatus. Elytra et pedes præcedentis, tibiis tamen apice leviter arcuatis.*

Less robust than the former, and further distinguished from it by the 7th antennal joint, (the one preceding the club) which is of a strongly cylindric shape, by the minuteness of the last joint of the maxillary palpi, the [obtuse and nearly obsolete tooth of the mandibles, the short-conical form of the thorax, and the tibiæ which are slightly bent at the apex.

### 31. SCYDMÆNUS PYGMÆUS. N.

*S. staturâ et colore præcedentis sed longius pubescens et sesqui minor; long. corp.  $\frac{1}{2}$  lin. Antennæ art. 4 et 4, 5 et 6 inter se subæqualibus, 7<sup>o</sup> majore, ovato, 8-10 subglobosis, fortius compressis 11<sup>o</sup> clavam formantibus, hoc magno, obconico, apice obtuso. Palpi maxill. art. 2<sup>o</sup> tenuiore, 3<sup>o</sup> invertè conico, 4<sup>o</sup> minuto. Mandibulæ obsolete uni-dentatæ Thorax conicus latitudine parum longior, elytris fortiter applicatus, basi 2-sinuatus et 4-foveolatus. Pedes et elytra præcedentis, his tamen amplioribus.*

Strongly allied to the two preceding species, still very much smaller, more compact and covered with longer hair—thus of rather a different appearance regardless of its size. From *S. pubescens* this species would principally differ in the shape of the 7th antennal joint, also in that of the first three club joints which are much more compressed and more hairy in *S. pygmæus*. The thorax of the latter is more firmly applied to the base of the elytra; the latter have a fuller, more robust appearance about them; the palpi are more slender, and the tooth of the mandibles is pointed. From *S. advolans* it would prin-

cipally differ besides in the generalities mentioned above, in the shape of the thorax, and in some of the points in which it differs from *S. pubescens*.

(b)

*Occiput narrowed.*

### 32. SCYDMÆNUS GLANDULIFERUS. N.

*S. robustus*; long. corp.  $\frac{3}{4}$  lin. Antennæ art. 3-7 sensim majoribus, 8-10 globosis, fortiter compressis cum 11<sup>o</sup> *glanduliformi* clavam formantibus, longe ciliatis. Palpi max. art. 2<sup>o</sup> tenuiore, 3<sup>o</sup> invertè conico, 4<sup>o</sup> mediocri. Thorax conicus latitudine basali hand longior, elytris fortiter applicatus, basi 2-impressus, in impressionibus 2-foveolatus.

Of the size of *S. advolans* and the plump shape and color of *S. pygmæus*, the latter being rather lighter than that of *S. advolans*; it has the longer (especially on the occiput and thorax) hairy vesture of the former. The occiput is slightly narrowed behind. The antennal club is composed of four joints, the first three of which are strongly compressed, the 4th being plump and of the shape of an acorn with its cup; all are strongly ciliated. The thorax is conic, firmly applied to the base of the elytra, as in the preceding species, depressed, and with two pits at the base posterior margin with two sinuosities. The shoulder ridges of the elytra are short, but rather strongly marked. The tibiæ are narrowed, sub-cylindric and hairy at the apex. Joints 2-3 of the tarsi are subequal, the anterior pair more, the intermediate less, contracted.

### 33. SCYDMÆNUS GRAMINICOLA N.

*S. gracilior*; long. corp.  $\frac{3}{4}$  lin. Antennæ art. 3 et 4, 6 et 7, 9 et 10 inter se subæqualibus, 5<sup>o</sup> adjacentibus paulo longiore, 3-7 subcylindricis, 8 subgloboso, 9-10 fortiter globosis cum 11<sup>o</sup> clavam formantibus. Palpi maxill. art. 3<sup>o</sup> invertè conico, 4<sup>o</sup> mediocri. Mandibulæ apice arcuatæ, medio acuminate 1-dentatæ, basin versus *sensim dilatatæ*. Thorax obconicus basi depressus, 2-sinuatus et 2-foveolatus, rectangulatus. Pedes tibiis *elongatis* basi apiceque arcuatis.

Of the usual brown color, legs and antennæ lighter, tarsi and palpi quite so, femora nigrescent at the apex, hairs of occiput and thorax rather long. The former slightly narrowed



behind, the head thus of a somewhat rhomboid form. Antennal club composed of three joints, the first two of which are strongly globose, the last being acuminate and slightly cut away on one side at the apex. The mandibles are furnished with an acuminate tooth at the middle, bent at the apex, and, what is rather uncommon in this g., gradually enlarged towards the base. The thorax is obconic, rather longer than broad. The elytra are somewhat more stretched than usual in this group, the rudimentary humeral costæ are rather prominent, they are separately rounded off at the apex. Tibiæ, more or less elongated, slightly bent at the base and apex, at the latter place sub-cylindric and hairy. Tarsi with joints 2-3 subequal, first pair slightly contracted. A sexual distinction appears to be expressed in the length of the tibiæ, which are less elongated in certain individuals, which are at the same time less robust than the others. The insect is easily distinguished by its general appearance.

#### 34. SCYDMÆNUS PYRIFORMIS. N.

*S. supra castaneus, subtus brunneo-testaceus, pedibus antennisque dilutioribus, tarsis palpisque flavo-testaceis, antennarum clava nigricante long. corp.  $\frac{1}{2}$  lin.*

Antennæ art. 3-8 fere subæqualibus excepto 5<sup>o</sup> parum longiore, 8<sup>o</sup> subglobozo, minore, 9-10 subglobosis majoribus cum 11<sup>o</sup> acuminato clavam formantibus. Palpi maxill. art. 3<sup>o</sup> inverte conico, 4<sup>o</sup> minuto. Pedes coxis 2 posticis distantioribus; tibiis 2 anterioribus basi apiceque leviter arcuatis, reliquis subsimplicibus.

A pretty little species, at once distinguished by its color, which is chestnut, darker at the base and suture of the elytra, and light, more or less brownish or yellowish below, the antennæ being of the latter color with a nigrescent club. The occiput is slightly narrowed, the head altogether plump, heavy and transverse. The antennal club is composed of 3 subglobose joints the last of which is acuminate and slightly cut away on one side as in some of the preceding species. The thorax is obovate, broadest below the middle and gradually narrowed towards the apex. The elytra have the usual two shoulder-ridges and are rather strongly dehiscent at the

apex. The two posterior coxæ are rather distant at the base; the tibiæ are slightly angustated and subcylindric at the apex, the four anterior ones hairy, the first pair, moreover, slightly bent at the base and apex, but the rest nearly straight

### 35. SCYDMÆNUS ANGUSTICEPS. N.

*S. castaneus*, antennis pedibusque dilutioribus, tarsis palpisque testaceis; long. corp. 1 lin.

Caput magnum occipite *fortiter angustato*, subtrigono, hoc cum thorace longe pilosis. Antennæ art. 3 et 4, 5 et 6 inter se subæqualibus, 7-11 gradatim majoribus, vel 9-10 subæqualibus, subglobosis, 8-10 leviter depressis cum 11° clavam formantibus. Palpi maxill. art. 2° tenniore, 3° inverte conico, 4° medioeri conico-acuminato. Thorax obconicus, basi subquadratus, 2-sinatus et 4-foveolatus. Elytra costis 2 fortioribus abbreviatis. Tibiæ subrectæ.

A handsome species of more or less deep chestnut color with lighter legs and antennæ. The head is large, heavy, and from the eyes to the neck strongly triangular; the occiput and thorax are covered with long hair, which adds much to the peculiar appearance of the insect. The antennæ are thick and robust, the club four-jointed. The thorax is subquadratic at the base up to the middle and conic towards the apex. The punctures or pits at the base are four in number. The scutellum is small. The humeral costæ are stronger developed than in any of the other species, and traceable to the middle of the elytra. The tibiæ are nearly straight: subcylindric at the apex: the four anterior ones hairy. The tarsi have joints 2-4 nearly subequal.

### B.

*Species without a neck.*

### 36. SCYDMÆNUS OVATUS. N.

*S. ovatus*, convexus, brunneus; long. corp.  $\frac{1}{2}$  lin.

Caput subquadrato-ovatum. Antennæ art. 3-11 sensim incrassatis, 9-11 subglobosis, depressis cum 11° magno, conico clavam formantibus. Palpi maxill. art. 4° minuto-acuminato. Thorax *amplius semiorbicularis*, margine posteriore medio producto, basi 2-foveolatus.

The color of this insect is, as usual, shaded off from brown to light yellow. However, in other respects it differs materially

from all the preceding species. The body is regularly oval, thorax and elytra convex, pubescent. The head is subquadratic-ovate the eyes rather small but prominent, the neck is altogether wanting. The antennæ are at the base as distant from each other as they can be, being inserted below the eyes; the club is three-jointed; the joints increase gradually in size from the third to the eleventh. The maxill. palpi have the second joint slender, the third rather pear-shaped, the fourth minute and acuminate. The thorax is very ample, semiorbicular, of the shape and nearly the size of the apical half of the elytra, the basal angles are acuminate and slightly envelope the shoulders, the posterior margin is prolonged in the middle, towards the scutellum the foveæ or basal impressions are two, and rather distant from each other. Scutellum obsolete. Elytra with two depressions at the base. Tibiæ straight; tarsi with joints 1-4 subequal or very nearly so. Mesosternal carina middling.

---

#### No. IV.

##### CYCLOSOMUS FLEXUOSUS. *Fab.* \*

To judge from what Lacordaire says of this *g.* in his *g. des Col.*—a work upon which, as I have said elsewhere, I look as containing the essence of all former researches—it would appear that the present species differs very materially from the three others hitherto described, namely, in the flatness of the antennal joints, in the serrated edges of the tibial spurs, in the existence of the tarsal brushes in the male, and

---

\* This insect was erroneously described by me in the first edition of these Papers. However, I retain part of my description, as it notices some peculiarities of the insect, of which I find no mention made in any of the works within my reach. It was owing to these peculiarities, and Lacordaire's statement that the three known species were of yellowish and green colour, as well as to having no detailed description of the *C. flex*, that I described it as new.

in the color—to say nothing of some other minor distinctions. The first three of these peculiarities—too important not to have been noticed by Lacordaire or any other describer of the g. had they been aware of them—add considerably to the characteristics which already constitute this g. one of the most remarkable of the extensive family of the *Oarabidæ*.

The antennæ are strong, stiff and short, reaching hardly beyond the base of the thorax: joint 1 is of middling size, 2 short, 3-4 are subequal, 5 rather shorter, 6-11 still shorter, subequal: joints 3-11 *are strongly compressed and pubescent, but only on the narrow side*. The tibiæ are strongly bicalcarated at the apex, the inner spur being longer than the outer one. In all legs these spurs are slightly compressed and serrated along the two narrow sides. Joints 1-4 of the anterior male tarsi, are slightly dilated, the apex of the first, second, and third, being at the same time furnished each with *two small white brushes*, below fenced in by spines. In the innermost tarsi of the male, the apical half of joint 1, and joints 2 and 3, are furnished on the inner side with strong brushes of reddish colour, bordered by rows of spines, *the entire lower surface forming one thick brush*, and not two, as in the anterior pair.

Regarding the habits of these insects, one would feel inclined to suspect them to be of a semi-aquatic nature, that is, the insects to frequent the banks of rivers, or other damp places; and I know that some entomologists are under the impression, that their mode of living is that of the g. *Omphron*. However, in my experience, the direct contrary is the case. *They live in the driest, hottest, and sandiest places that can be found, where they burrow in the sand, exactly in the manner of the well-known g. of the Amaras*. I have of late taken considerable numbers of them in the Cinnamon Gardens of Colombo, in holes made by the rooting up of weeds, into which they had run, and could not escape, the loose sand giving under them whenever they attempted to do so. When wishing to find them, I had to search the corners of these holes, where some leaves had usually collected, when I would sometimes

dig up eight at a time, not seldom rather deep in the sand. They are quick of motion, and being thus pursued, immediately bury themselves in the sand.

The diagnosis as given by Lacordaire requires at all events to be entirely recast, and the g. to be removed from the tribe *Cratoceridæ*, (one of the characteristics of which is the want of foot-brushes in the male) in which he has placed it.

### III. OCHTHEPHILUS, n. g. N.

Fam. CARABIDÆ.

Trib. PAGONIDÆ.

Corpus oblongum, subparallelum, valde depressum. Caput magnum antice trigonum; oculis magnis, ovatis, prominulis; collo forti Mentum subquadrate emarginatum, lobis extus fortiter rotundatis, apice abrupte acuminatis, dente parvo acuminato. Ligula parva apice quadrate truncata, libera, paraglossis setiformibus marginem anteriorem longe sperantibus. Palpi robusti art. 4<sup>o</sup> elongato tenui, acuminato; maxillares art. 3<sup>o</sup> interne, 2<sup>o</sup> externe incrassato; labiales art. 3<sup>o</sup> robusto externe incrassato, 2<sup>o</sup> parvo, cylindrico. Labrum parvum basi, angustatum subtrigonum, antice emarginatum. Mandibulæ elongatæ, porrectæ, trigonæ, apice arcuatæ, infra medium pluries dentatæ. Antennæ robustæ corporis med. fere attingentes, art. 1<sup>o</sup> et 11<sup>o</sup> medio-cribis, subæqualibus, 2-4 et 5-10 inter se subæqualibus, illis subcylindricis, his cum 11<sup>o</sup> ovatis. Thorax subcordatus basi quadratus. Pedunculus brevis. Elytra apice rotundata. Pedes anteriores tibiis profunde emarginatis tarsis leviter contractis, art. 1-4 gradatim minoribus, art. 1<sup>o</sup> subcylindrico, 2-4 subtrigonis, hoc subtus apice spino tenui munito, 5<sup>o</sup> sat magno, unguibus simplicibus.

#### 37. OCHTHEPHILUS CEYLANICUS.

*O. alatus* brunneo-testaceus, pedibus palpisque testaceis, tenciter pubescens, fronte profunde 2-sulcata; elytris obsolete striatis, in striis punctatis; long. corp, 1½ lin.

In fluviorum ripis Bembidiorum more victitat.

Apparently allied to *Trechus*, from which, however, it would seem to differ in the structure of the palpi, the labrum, &c.

The head is as broad as the thorax, and altogether of about the same size. It is strongly triangular from the eyes to the tip of the mandibles, the forehead is impressed with two deep

longitudinal furrows; the eyes are large, rather oval and prominent; behind them the head is abruptly contracted into a thick neck. The antennæ are long and thick, reaching nearly to the middle of the body, joints 1 and 11, 2-4, 5-10 are subequal among themselves, 5-11 oval, 1-4 subcylindric. The labrum is small, rather triangular, being narrowed at its base, it is emarginated in front with a slight angle in the middle of the emargination. The mandibles are long, straight, triangular, bent at the tip only, dentated below the middle, the one more so than the other. The maxillæ are thin and slender, gently bent outwards at the base and inwards at the apex, the outer lobe corresponding with the inner one in shape and strength. The palpi are robust, both the maxillary and labial ones have joint 4 elongated, thin and acuminate, in fact needle-shaped, firmly implanted in the preceding one, not loosely hinged to it. The maxillary ones have joints 3 and 2 robust, the former swollen on the inner, the latter on the outer side. In the labial ones joint 3 is still plumper than in the others, but differs in shape by being incrassated on the outer, instead of the inner side, the second joint being at the same time quite small and cylindric. The mentum is large and simple as above described. The ligula is small, oblong, very slightly narrowed and transversely cut away at the apex, the paraglossæ separate from its sides a little below the anterior corners, they are setiform and reach much beyond it. The whole organ is of membranaceous texture: having, however, a more substantial centre or back. The thorax and elytra are simple and sufficiently described above. I may add that the former is divided by a longitudinal furrow and that both are furnished with a narrow margin at the sides. The scutellum is very small, and the abdomen furnished with a short peduncle. The legs are weak, simple, and nearly equal, the anterior tibiae are deeply notched, the lower margin of the fourth tarsal joint of the same pair is furnished with a long thin spine, the apex of which fits in between the claws, as in *Lymnæum Steph.* I have been unable to discover any footbrushes or other sexual distinctions, in the specimens be-

fore me and therefore conclude that accidentally they are all females.

The habits of the insect are those of the *Bembidia*, in whose society it lives upon the banks of rivers, taking, like them, readily to its wings. I have found it occasionally in considerable numbers upon the sandy banks of the Mahá Oya in the neighbourhood of Negombo close to the edge of the water.

#### IV. CREAGRIS, n. g. N.

Fam. CARABIDÆ.

Trib. LEBIIDÆ vel PERICALIDÆ.

Corpus oblongum valde depressum. Caput magnum robustum; oculis mediocribus, ovatis, sat prominulis; collo brevi. Mentum forma ferri equini vel trifurcatum (hinc n. g. *Creagris*) lobis angustis, subparallelis, apice oblique truncatis, angulo interno producto, dente lobis parum brevior, tenui, acutissimo. Ligula magna cornea apicem versus dilatata, apice transversim truncata angulis rotundatis, paraglossis sat robustis connatis marginem anter. non attingentibus, apice vix liberis, ovatis. Palpi maxill. art. 4<sup>o</sup> claviformi apice fertiter truncato, 3<sup>o</sup> parvo, 2<sup>o</sup> intus excavato; labiales art. 4<sup>o</sup> subelliptico, truncato. Labrum maximum, suborbiculatum, convexum. Mandibulæ parvæ basi obsolete unidentatæ, labro obtectæ. Antennæ robustæ humeros parum superantes submoniliformes art. 1, 3 et 11 longitudine fere subæquali, mediocribus, 2<sup>o</sup> parvo, basi cylindrico, apice rotundato, 4-10 subæqualibus, cum 11<sup>o</sup> ovatis. Thorax parvus, capite sesqui minor, transversus, longitudine duplo fere latior, infra med. fortius angustatus, basi parum prolongatus. Pedunculus brevis. Elytra apicem versus leviter dilatata, apice fortiter subquadrate truncata. Pedes robusti simplices subæquales, ant. tibiis profunde excavatis, omnes tarsis brevibus, art. 1<sup>o</sup> sequentium 2 fere longitudine, subcylindrico-trigono, 2-3 gradatim minoribus, 2<sup>o</sup> trigono, 3<sup>o</sup> transversim trigono, 4<sup>o</sup> magno, profunde bilobo, 5 mediocri, unguibus, simplicibus, art. 4<sup>o</sup> subtus dense penicillato.

#### 38. CREAGRIS LABROSA. N.

*C. picea*, subtus dilutior, ore antennisque, coxis, trochanteribus, femorum tibiærumque apice et tarsis brunneis; dense punctata tenniterque pubescens; elytris striatis; long. corp. 4½ lin.

Specimina nonnulla prope Colombo nocte ad lumen cepi.

I consider this scarce and interesting insect to form a passage between the *Lebiidæ* and *Pericalidæ*, but am doubtful

to which of these two tribes to refer it as, although it partakes of the characteristics of either, it is at the same time distinct from both. Distinguished in several respects, its most extraordinary character lies in the curious shape of the mentum. This is, however, easily described as large, of the shape of a *horseshoe* with a long, thin, very pointed tooth in the middle, the apical half of the sides (lobes) being at the same time gently dilated, the apex itself being obliquely cut away from the outer towards the inner side—the inner angle being the most advanced, and slightly dentated at the edge thus formed. Or it may also be described as a *fork* with the outer teeth somewhat enlarged, truncated at the apex and so forth. The other parts of the mouth have not much to distinguish them, with the exception, however, of the labrum which attains a very extraordinary degree of development, occupying *rather more than one third of the whole head, although the latter itself is large and heavy*. It is of a suborbicular shape, very slightly produced in front into an obtuse angle, is vaulted, covers the mandibles, has two longitudinal impressions at the sides of the base and is highly polished. The head has two impressions in front of the eyes, is densely punctured and thinly pubescent, it is strongly but gradually contracted behind the eyes and formed into a short neck. The antennæ are strong and reach a little beyond the shoulders, joints 1, 3 and 11, are of about equal length, middling, the former two subcylindric; joint 2 is small, rounded, 4-10 sub-equal and with 11 oval. The thorax is small, only half as large as the head, rather narrower, strongly transverse, nearly twice as broad as long, slightly emarginated in front, the anterior angles rounded, contracted below the middle, subquadratic and prolonged at the base, posterior angles depressed, longitudinally divided by a deep furrow. The elytra are striated, and, as the thorax densely punctured and thinly pubescent. The legs are strong, simple, and subequal, the anterior tibiæ are deeply notched, the first joint of the tarsi is as long as the two succeeding ones together, subcylindric, the second triangular, the third of a similar but more transverse form, smaller; all three have the apical angles



acuminated, the fourth is large and deeply bilobed, the fifth middling, thin, the claws simple. The tarsi are altogether short and strong, the first joint is furnished with longer, the second and third with shorter stiff hair, whilst the fourth is strongly penicillated below. The anterior tibiæ are slightly spinose, the others more so.

The legs in all my specimens are exactly the same, and I hardly know whether they are males or females. The insect has a peculiar, rather strong smell about it, resembling that of soap.

## V. HETEROGLOSSA, *n. g.* N.

Fam. CARABIDÆ.

Trib. GALERITIDÆ.

Corpus oblongum, subparallelum, depressum, tenuiter hirsutum, Caput mediocre, oculis semiglobosis sat prominulis; collo brevi. Mentum sat profunde subquadrate emarginatum, lobis magnis extus fortiter retundatis apice abrupte acuminatis, dente magno excavato, apice leviter inflecto, obtuso, magis minusve profunde sinuato. Ligula subcornea apice libera, truncata: vel quadrata vel obconica vel leviter bisinuata; paraglossis cylindricis, marginem anteriorem longissime superantibus, magis minusve incurvatis. Palpi hirsuti art. ultimo sat elongato, subcylindrico, apice truncato vel subtrigono. Labrum transversum antice emarginatum. Mandibulæ validæ trigonæ, apice arcuatæ, basi pluries dentatæ. Antennæ robustæ corporis med. attingentes, art. 1<sup>o</sup> incrassato sequentibus 2 longiore, 2<sup>o</sup> parvo, 3-11 subæqualibus. Thorax subcordatus, basi transversim truncatus leviterque prolongatus. Pedunculus brevis. Elytra apice fortiter subquadrate truncata, costata costis 16 majoribus, in interstitiis subtilissime bicostulata, in sulcis (sulco e tribus inter costas binas majores medio excepto) tenuiter pilosa, in omnibus transversim rugulosa. Pedes anteriores tibiis sat fortiter emarginatis, tarsis maris art. 1-3 leviter dilatatis, subtus squamularum seriebus 2 munitis, art. 1<sup>o</sup> elongato-trigono, 2-3 rotundato-trigonis, 3<sup>o</sup> præcedente parum minore, 4<sup>o</sup> parvo, cordato, 5<sup>o</sup> plus sesqui minore, his omnibus angulis acuminatis, 5<sup>o</sup> magno, unguibus simplicibus.

This diagnosis may appear somewhat vague, still I have been unable to express the characteristics of the insects from which it is drawn in more precise terms, although they have features quite peculiar to themselves by which they are easily recognised when once seen.

The points on which the three species which form this genus more or less disagree are the following:—

1) The labrum—is more transverse in *H. elegans* and less deeply emarginated in *H. ruficollis* than in the other two species respectively—still in all three it is *emarginated*, and has moreover the peculiarity of being furnished with bristles at the two anterior corners.

2) The mentum—is subquadratically emarginated, the lobes being strongly rounded on the outer side and abruptly acuminate at the apex. At the base of the emargination it is furnished with a broad, excavated tooth, which is inflected and obtuse at the apex. So far all three species agree. However, whilst in *H. elegans* and *ruficollis*, this tooth is slightly emarginated at the apex, it is sharply notched in *H. bimaculata*,—in fact bilobed, the lobes being large and rounded at the apex. I look upon this notch, which is sharp but not deep, as a mere variation from the emargination existing at the apex of the tooth of the two former species.

3) The palpi—labial as well as maxillary have their terminal joint truncated at the apex—and so far again all three species agree. However, whilst this joint is of elliptic form in the palpi of *H. ruficollis*, it is in *H. elegans* only so in the labial ones, that of the maxillary ones being cylindric at the base. In *H. bimaculata* finally, this joint is rather clubshaped or subtriangular and more strongly truncated than in the two former species.

4) The ligula—is of subcoriaceous texture, middling size, the shape of an oblong square, free and transversely truncated at the apex. These characters are common to all three species and in *H. ruficollis* I have nothing to add to it. However, the anterior margin, which is straight in this species, is slightly bisinuated in *H. elegans*, the outer angles being acute and the central one obtuse. The ligula of *H. bimaculata* differs from both the former in as far as it is narrowed towards the apex and depressed towards the sides and the front, the anterior margin is otherwise cut away straight, without any sinuosities, but it is rather strongly armed with

bristles. The paraglossæ agree in all three species in as far as they are highly developed, reach much beyond the anterior margin of the ligula and are more or less bent inwards. Their greatest development they assume in *H. elegans*, in which they nearly touch each other in front of the anterior margin, being cylindric and slender at the same time. In *H. ruficollis* the paraglossæ are somewhat shorter and straighter, and in *H. bimaculata* still more so.

On all other points the three species perfectly agree; in saying which I lay particular weight upon the unusual sculpture of the elytra, and the rather peculiar hairy vesture of the insects, bearing also in mind their general appearance, proportions, system of coloration, mode of living, etc. As to the hairy vesture of certain parts of the body and the sculpture of the elytra, it is true that these are not generally looked upon as of much importance; however, they appear to me so in this instance, as they present certain unusual variations, repeated in all three species. The hairy vesture consists in thin yellowish or reddish hairs, thinly seminated over the back, and still more thinly over the whole of the lower surface of the insects, being at the same time longer at the latter place. This vesture acquires its greatest density on the legs, especially the tibiæ and tarsi, whilst their uniform presence at the palpi forms almost a generic character. The elytra are exquisitely sculptured into about eight larger costæ on either of them and into two smaller ones between every two of these; the furrows thus formed are finely transversely rugose and—with the exception of the central furrow between every two larger costæ—thinly pubescent.

### 39. HETEROGLOSSA ELEGANS. N.

*H. supra* rufo-castanea, capite obscuriore, maculis 2 humeralibus obsoletissimis ferrugineis; subtus dilutior, pedibus, antennis oreque subtestaceis, elytris ad angulos apical. extern. testaceis; long. corp.  $3\frac{1}{4}$  lin.

In lacus Colombensis ripis sub vegetab. putrescent. non infrequenter cepi.

An agile, pretty little insect of chocolate color and with its family features about it. Head smooth, polished, above

and below slightly punctured, with two impressions in front of the eyes, anterior angles of labrum rather acuminate. Thorax deeper and more densely punctured than the head, with the elytra thinly hirsute, rather strongly emarginated in front, less so behind, sides, especially at the basal angles, depressed, divided longitudinally by a deep furrow. Scutellum, like thorax, punctured and hairy. Elytra with the inner apical angle right and the outer rounded off, largely punctured within the margin, especially near the apex. Tibiæ with a row of larger spines down the outer and a row of smaller ones down the inner side, four calcarated at the apex, the two inner spurs larger.

#### 40. *HETEROGLOSSA RUFICOLLIS*. *N*.

*H. colore præcedentis sed obscurior, thorace pectoreque rufo-testaceis, antennis art. 3 primis nigrescentibus; long. corp. 4½ lin.*

*Cum præcedente et per occasionem nocte ad lumen cepi.*

The shape of the body is quite that of the former but the insect is larger. The head is less distinctly punctured than in the former, and there is an additional impression in the middle of the forehead. The thorax is also less deeply punctured, but the divisional furrow is more so than in the preceding species. The anterior tibiæ appear somewhat less deeply notched. There is nothing else to add to the description that has not been pointed out already.

#### 41. *HETEROGLOSSA BIMACULATA*. *N*.

*H. subcastanea, thorace dilutiore, capite rufo-testaceo, elytris ante medium maculis 2 flavis, pedibus abdominisque apice testaceis; long. corp. 5½ lin. variat colore obscuriore et dilutiore.*

*Ubi præcedentes sed infrequenter legi.*

Head, with the exception of the forehead, deeply punctured, with two impressions in front of the eyes, anterior angles of labrum rounded. Thorax densely and deeply punctured, with elytra thinly pubescent. The latter with a round yellow spot at the middle of either. This species is capable of discharging a pungent, blistering liquid of brown color

and strong smell from the anus. I have often handled the other two species but observed nothing of the kind.

---

## No. V.

THE TRIGONOTOMIDÆ with an elliptic terminal joint of the palpi are abundantly represented amongst the Ceylon *Cara-bidæ*, thus making amends for the want of other tribes of the section to which they belong. I have now before me a great many individuals of different species which I have endeavoured to distribute into genera after the works of Lacordaire, Dejean and others of less importance.

A single glance almost convinced me that they must belong either to *Abacetus*, *Distrigus*, or *Drimostoma*—genera closely allied, and whose principal, (in fact only essential), distinction would appear to reside in the shape of the mentum-tooth. If it is a well established fact, which cannot be doubted, from the above authors, that this tooth is *pointed* in *Drimostoma*,—*large, rounded, equalling the lateral lobes* in *Abacetus*,—and *large and truncated* in *Distrigus*,—the species described below could not, as to their genera, be distributed otherwise than I have done, namely, five *Distrigi* and one *Drimostoma*. The species which I have drawn to the former genus have a large, more or less square tooth, slightly rounded at the anterior angles. It is impossible to call this tooth of the five species *pointed* in any way; they cannot therefore belong to the genus *Drimostoma*; nor can any of them be drawn to *Abacetus*, which genus is moreover apparently exclusively African. As to the insect which I

---

*Barysomus Gyllenhali* Dej. A gross oversight of the vesture of the anter. male tarsi and some incorrect information regarding the insect I received from Europe led me into the error of describing it as new in the first edition of these papers. However, having since examined it more closely, I may mention here that joints 2-4 only of the anterior male tarsi are furnished with squamulæ below, and not joints 1-4, as stated by other authors.

have placed in the genus *Drimostoma*, its mentum-tooth is not exactly pointed, but it is altogether narrower than in *Distrigus* and might well be called "*assez aigué*," as Dejean describes it. This insect differs, moreover, very materially in general appearance as well as in its details from my *Distrigi*; and I feel sure that it belongs to the genus in which I have placed it, although it does not quite agree with Lacordaire's description—the labrum being emarginated in front, the second joint of the maxill. palpi exhibiting nothing unusual, &c. As to the species which I have established, I feel very certain that they are new and good ones, as it would appear from the quotations in Lacordaire "*Gen. d. Col.*" that since Dejean's descriptions no new ones of Indian species have been published.

These insects live in the manner of the European *Feronidae*, but appear to affect rather damp localities, some of them take freely to their wings and fly commonly into houses in the evenings during the rainy weather.

#### 42. *DISTRIGUS COSTATUS*. N.

*D. nigerrimus*, nitidus, subtilissime parce punctulatus, ore pedibusque piceis, tarsis antennisque castaneis, palpis brunneo-testaceis, long. corp. 4½ lin.

Capite clypeo fronteque leviter excavatis, hac impressionibus 2 lateralibus semilunaribus profundissimis rugulisque nonnullis transversis; mandibulis fortiter sulcatis; menti dente magno excavato; thorace longitudine parum latiore, breviter obcordato, lateribus rotundato, basin versus angustato, basi truncato medio leviter emarginato, antice lateribus fortiter deflexo, dorso posticeque plano, basi longitudinaliter profunde 2-impresso, inter impressionibus leviter transversim rugoso, ad marginem ant. et post. obsolete sulcato, dorso rugulis nonnullis transversis subtilibus, linea med. longitud. subtili extremis profundis diviso; elytris profunde striatis, interstitiis fere planis, puncto ad striam 2<sup>a</sup> medio obsolete; *tarsis dorso fortiter 3-costatis*; prosterno plano.

Sab quisquiliis in ripis lacus Colombensis communis.

Apparently closely allied to *D. impressicollis*, Dej. However, if the description given in the Spec. gen. embraces all the characteristics of this latter species mine is undoubtedly different from it. Dejean says nothing about the costæ on the

back of the tarsi which are the principal characteristics in my species, nor are such costæ of general occurrence or of so little importance that it could be supposed they had been left unnoticed by Dejean from these reasons. I cannot possibly call the thorax of my *D. costatus* "subquadratic;" it is rounded at the sides, narrowed behind, and cut away at the base. The striæ of the elytra of my species are not punctured in the bottom, as those of the *D. impressicollis* are stated to be. In mentioning the inter-antennal impressions Dejean would certainly not have overlooked the depression in the centre of the forehead nor that of the clypeus, which distinguish my insect, had they existed in the one he described. The former is round: the latter transverse. I further fail to discover in my species the "*reflet un peu changeant*" of the elytra, and that the base of the thorax is "*assez fortement ponctuée et que les points se confondent souvent ensemble*;" nor do I consider the interstices of the elytra "*relevés, presque arrondis*," or the head "*un peu rétrécies postérieurement*;" the skull is of the same breadth from the antennæ to the occiput.

#### 43. *DISTRIGUS SUBMETALLICUS*. N.

*D. supra niger æneo-micans, nitidus; subtus piceus, pedibus, ore antennisque obscure castaneis, tarsis brunneo-testaceis long. corp. 3 lin.*

Capite præcedentis sed fronte haud excavato; mandibulis strigosis; menti dente mediocri; thorace breviter rotundato-obcordato, præcedente lateribus magis rotundato, antice magis deflexo, postice fortius quadrato, hic 3-impresso, impressione media lateralibus minus profunda ad apicem prolongata, inter impressionibus punctato longitudinaliterque ruguloso; scutello excavato; elytris striatis, ad striam 2<sup>m</sup> ante medium utrinque puncto impresso, interstitiis deplanatis; tarsis lævibus; prosterno profunde canaliculato.

Ubi præcedentem specimen singulum m. cepi.

#### 44. *DISTRIGUS RUFO-PICEUS*. N.

*D. rufo-piceus, nitidus, pedibus, thoracis elytrorumque margine testaceis, antennis brunneo-testaceis, mandibulis brunneis, long. corp. 3 lin.*

Capite inter antennis profunde longitud. 2-impresso, fronte medio leviter depresso, labro quadrato-rotundato, mandibulis infra medium sulcatis, menti dente mediocri, excavato, apice subrotundato; thorace D.

costati, sed parum brevior, basi 2-impresso, linea media longitud. fere obsoleta, rugulis nonnullis transversis subtilibus; scutello, elytris pedibusque præcedentis sed elytris puncto ad striam 2<sup>m</sup> infra medium obsoleto; prosterno leviter canaliculato.

In ripis lacus Colombensis specimen singulum legi.

#### 45. *DISTRIGUS ÆNEUS*. N.

*D. supra æneus, subtus piceus, pedibus dilutioribus, antennis palpisque rufo-piceis, long. corp. 2½—3 lin.*

Capite ante oculos profunde oblique 2-sulcato, rugulisque nonnullis transversis, clypeo fronteque sæpius leviter depresso, mandibulis leviter sulcatis, menti dente mediocri; thorace rotundato-obcordato, basi quadrate truncato, 3-impresso, impressione media minus profunda in lineam subtilem ad apicem prolongata, inter impressionibus profunde punctata, antice leviter strigoso, dorso subtiliter transversim ruguloso; elytris striatis, ad striam 2<sup>m</sup> medio distinctius puncto impresso; prosterno sat fortiter canaliculato.

Prope Colombo in arenis subhumidis et nocte ad lumen communissimus.

#### 46. *DISTRIGUS DEJEANI*. N.

*D. piceo-niger, subtus sæpius rufo-piceus, nitidus, capite æneo-micante, pedibus, elytrorum margine antennisque rufo-piceis, palpis testaceis long. corp. vix. 2½ lin.*

Capite inter antennas 2-impresso, fronte leviter excavato, mandibulis subtiliter sulculatis, mentum præcedentis; thorace robustiore, ut in præcedente sculpto et signato sed antice non strigoso; elytris pedibusque præcedentis, illorum tamen puncto minus distincto; prosterno fere plano.

Cum præcedente communissime occurrit.

#### 47. *DRIMOSTOMA CEYLANICUM*. N.

*D. nigro-piceum, nitidum, pedibus piceis, tarsis, antennis oreque, dilutioribus, palpis testaceis, long. corp. 2½—3 lin.*

Capite ante oculos profunde 2-impresso, labro antice leviter emarginato, mandibulis elongatis, rectis, acutis, lævibus, menti dente sat acuminato, antennis art. 2-4 gradatim longioribus; \* thorace obcordato, postice fortius angustato, quadrato, lævi, basi 2-impresso, lena longitud. med. diviso, antice impressione semilunari (impressionibus his omnibus

---

\* In the *Distrigi* just described, joints 3 and 4 are sub-equal.



profundioribus); elytris striatis, interstitiis parum elevatis; prosterno sat fortiter longitud. impresso.

In prov. occid. non frequenter occurrit.

#### 48. CASNONIA PUNCTATA. N.

C. supra subtusque (occipite abdomineque exceptis) dense profundeque punctata, brunneo-picea, elytrorum margine maculisque 2 apicalibus longitudinalique cum margine confluentibus brunneo-testaceis, pedibus flavis, trochanteribus, geniculis tarsisque obscurioribus, ore dilute brunneo, antennarum art. 1<sup>o</sup> palporumque art. 2 basalibus flavis; long. corp. 3 lin.

Specimina nonnulla mens. Decemb. prope Colombo nocte ad lumen cepi.

Smaller than the *Ophionea cyanocephala*. The head is robust, with two impressions between the antennæ and a third just above them, somewhat of the shape of an inverted V. Occiput less narrowed than in *O. cyanoceph.*, smooth. The anterior part of the head deeply punctured. The labrum is lightly produced in the middle. Thorax much plumper than in *O. cyanoceph.*, hardly as long as the head, not much narrower, conic, considerably narrowed and cylindric at the base, densely and deeply punctured, especially at the base. Elytra with the shoulders straighter than in *O. cyanoceph.*, impressed with rows of deep punctures growing smaller and shallower towards the apex, with a few small hairs near the latter part; in the third and fifth interstice three setigerous punctures, in the third and fourth interstice a longitudinal apical macula of yellowish color flowing together with the margin which is of the same color, two shallow impressions on either side, one below the shoulders, the other near the apex. Legs shorter than in *O. cyanoceph.*

#### 49. CASNONIA PILIFERA. N.

C. glaberrima, nitidissimi (quasi lacca obducta), pilis longis sparsis vestita, nigra, ore (labro excepto) antennisque brunneis, his apicem versus dilutioribus, elytris maculis 2 subapicalibus argenteis, pedibus piceis, femoribus basi albis, trochanteribus obscurioribus, tibiis tarsisque brunnescentibus; long. corp. 3½ lin.

Specimina nonnulla cum præcedente cepi.

This elegant species is of the same size as the *O. cyanocephala*, but, with the exception of the elytra and abdomen, which are shorter and plumper, still more slender and graceful. Head large, very narrow and prolonged behind, much more so than in *O. cyanocephala*, with two large shallow impressions between the antennæ, and another small one just above them. Occiput slightly transversely rugose. Thorax very slender, half as broad as the head, of hardly the same length, obconic, constricted below the apex, then gradually increasing in size to below the middle, the base abruptly narrowed, cylindric and impressed with three deep annuli-form wrinkles. Elytra about as long as thorax and occiput together, increasing very sensibly in breadth to below the middle. The apex is much more obliquely cut away than in *O. cyanocephala* or the preceding species. The shoulders are full and hide the margin. Just below them the elytra are deeply excavated; showing, moreover, three deep longitudinal impressions in the bottom of either excavation and a slight yellowish spot, hardly to be distinguished, at the outer part of it. A round spot of silvery appearance adorns the hind part of either elytron. There are two rows of long thin hairs, placed at considerable distances from each other, on the back of either elytron and a third just within the margin; the same thin hairs are scattered about the thorax, femora, and elsewhere. The legs are longer and more slender than in *O. cyanocephala*.

The *Ophionia cyanocephala* is not scarce in this part of the Island. It affects rather damp, grassy localities, where it mounts upon the stalks of the plants, as Helfer has observed of some species in Bengal, but quite different from the observations Lacordaire has made with regard to the American species of the genus. However, it is much more frequently taken about the light at night. The two species just described are much scarcer. Mr. C. A. Dohrn of Stettin writes to me that he has received another species from me (*Cypris D.*) which, however, I do not recollect. It would appear to be smaller than either of the former, black, with white tips to the antennæ.

VI. SYMPHYUS, *n. g.* *N.*

Fam. CARABIDÆ.

Trib. FERONIDÆ.

Corpus robustum oblongo-ovatum, subdepressum. Caput mediocre postice haud angustatum, oculis mediocribus, sat prominulis, globosis. Mentum semicirculare profunde emarginatum, dente forti spiniformi, lobis haud brevior, ligulæ caninato (hinc *n. g. Symphus*), profunde excavato. Ligula subcoriacea invertè trigona, dorso elevato, paraglossis magnis connatis, eam sat longe superantibus, apice cylindricis. Palpi art. 4<sup>o</sup> ovato, apice truncato; maxillares art. 3<sup>o</sup> elongato. Labrum parvum profunde angulate emarginatum. Mandibulæ validissimæ, subtrigonæ, porrectæ, una 1-, altera 2-dentata. Antennæ filiformes, humeros parum superantibus, art. 1<sup>o</sup> mediocri, 2<sup>o</sup> parvo, 3<sup>o</sup> sequenti paulo minore, 4-11 subæqualibus, 5-11 depressis. Thorax subquadrato-cordatus lateribus rotundatus, basi angustatus, quadratus, angulis posticis leviter oblique truncatis. Elytra ovata, parallela, apice rotundata et leviter utrinque sinuata. Pedes mediocres, tibiis ant. leviter dilatatis, profunde emarginatis; intermed. fortiter spinosis; tarsi art. 1<sup>o</sup> cylindrico-trigono, 2-3 trigonis, 4<sup>o</sup> obcordato, unguiculis simplicibus. (*Mas latet*).

50. SYMPHYUS UNICOLOR. *N.*

*S. niger*, nitidus, glaber, pedibus oreque piceis, long. corp. 8½ lin. lat. 3 lin.

Capite inter antennas 2-foveolato, mandibulis sulcatis; thorace antice haud, postice vix emarginato, hic 2-impreso, linea longitud. media diviso, ad marginem posteriorem longitud.—, dorso subtiliter transversim ruguloso; scutello leviter excavato; elytris striatis, ant. striis punctatis, interstitiis vix elevatis, cum thorace anguste marginatis.

Specimen singulum f. prope Colombo mens. Decembr. nocte ad lucem cepi.

This description is made from a single female individual, but I have little doubt that the insect belongs to the numerous tribe to which I have referred it; in which it ought perhaps to be placed near *Eccoptyogenius Ohaud*. I am, however, not sure whether the shape of its ligula does not entitle it to a place amongst the *Anchonoderidæ*. I may add to the above description that the accessory stria of the elytra is present, but that the puncture usually found upon the third interstices is wanting. The general appearance of the insect presents nothing whatever particular. However, upon further inspection

the deeply notched labrum and the strong porrected mandibles are very striking. The labrum appears to me of extraordinary construction; the mentum is large and of semicircular shape, deeply emarginated, which renders the lobes heavy, rounded outside, and pointed at the tip. In the bottom of this emargination stands a pointed, spinelike tooth, as long as the lobes. This tooth is deeply excavated or grooved and is clearly seen to be to its full length soldered together with the basal part of the ligula. Probably the entire mentum is in this manner connected with the adjoining part of the ligula; but in the other parts it is not so clearly observable as in the tooth, and I have not dissected the labrum. The ligula itself is of a leathery consistence, of the shape of an elongated inverted triangle with an elevated back, the anterior margin is straight and somewhat prolonged beyond what would be the sides of the triangle. The paraglossæ are of membranaceous texture, very broad, adhering to the sides of the ligula to its full length, taking then a slender, cylindric form and reaching considerably beyond it, being at the same time slightly bent inwards.

## VII. CALODROMUS, n. g. N.

Fam. CARABIDÆ.

Trib. HARPALIDÆ.

Corpus robustum, ovatum, subconvexum. Caput mediocre subquadratum, postice haud angustatum; oculis minoribus sat prominulis. Mentum profundius sublunatum emarginatum, edentatum, lobis obtusis. Ligula oblonge quadrata, apicem versus dilatata, apice medio leviter producta, libera, paraglossis robustis eam parum superantibus, apice obtusis. Palpi art. 4<sup>o</sup> elliptico, apice leviter truncato. Labrum subtransversum, antice emarginatum, angulis rotundatis. Mandibulæ validæ, una 1-, altera 2-dentata. Antennæ robustæ, thoracis basin attingentes, art. 1, 3, 11 et 4-10 inter se subæqualibus, 1-2 cylindricis, 3<sup>o</sup> basi angustato, 4-11 ovatis, leviter depressis. Thorax transversus, lateribus leviter rotundatus, basi parum angustatus, quadratus, antice leviter emarginatus. Elytra thorace parum latiora, apice rotundata. Pedes robusti, ant. tibiis apice leviter dilatatis, profunde emarginatis, tarsis art. 1-4 gradatim minoribus, 1<sup>o</sup> subtrigono, 2-4 transversim trigonis, unguiculis validis, simplicibus, *mas* art. 1-4 leviter dilatatis, subtus squamulis 2-seriatim munitis; pedes intermed. et post. tibiis fortiter spinosis, tarsis simplicibus.

## 51. CALODROMUS EXORNATUS. N.

C. glaber, nitidus, supralæte viridis, thoracis margine laterumque fascia inframarginali testaceis, capite viridi-brunneo, antice brunneo, scutello cum sutura brunneis, subtus brunneus, pedibus testaceis; long. corp.  $4\frac{1}{2}$ — $4\frac{1}{2}$  lin.

Capite inter antennis 2-impresso, thorace capite quartâ parte-, longitudine duplo latiore, basi 2-impresso, leviter rugoso-punctato, linea longitudinali media diviso, cum elytris anguste marginatis; his profunde striatis.

Specimina nonnulla mens. Nov. et Decemb. prope Colombo nocte ad lumen cepi.

Very pretty insects apparently closely allied to the African genus *Bradybanus* Dej. from which, however, they differ in the structure of the ligula and in other minor points. They are quite of the shape of a *Harpalus*, and I have no doubt that their habits are those of the latter. Joints 4—11 of the antennæ have very much the appearance of grains of rice strung together. The metallic green color with which the insect is adorned on the back is very rich; on the elytra it forms a pattern of two triangles with their tips down, that of the upper one being immersed in the base of the lower one, and the apex of the latter being divided. These triangles are flanked on either side by a broad longitudinal belt of yellowish color. The margin is again green with the exception of the apex which is occupied by the yellowish belt. The thorax is green in the centre and yellowish along the sides. The head is more or less brownish-green, lighter in the middle; the mouth is brown.

## 52. ZOPHIUM PUBESCENS. N.

Z. rufo-testaceum, oculis nigris, occipite nigrescente, elytris pubescentibus fuscis maculis 2 subhumeralibus, 1 apicali communi testaceis ornatis; long. corp.  $3\frac{1}{2}$  lin.

Antennis art. 1<sup>o</sup> capitis vix longitudine; labro integro; palpis art. ultimo trigono; menti dente magno obtuso, profunde canaliculato; thorace elongato-cordato, capitis latitudine, illo parum-, latitudine duplo longiore, medio leviter longitudinaliter depresso; elytris subtilissime dense pubescentibus, obsolete striato-impressis, humeris obsoletis.

Specimina nonnulla in prov. occid. nocte ad lumen cepi.

This description does not quite agree with Lacordaire's diagnosis of the genus *Zophium*. The labrum, the tooth of the mentum are not what they ought to be according to this author. However, Schmidt-Göebel in his "Col. Birm." has already departed from Lacordaire's formula by describing six species of *Zophia* with an entire mentum-tooth, which, according to the former author, would make them *Polystichi* rather. The fact is, that this part of the labrum appears to be variable. In all other respects the insect agrees with Lacordaire's description of the genus.

The labrum is entire; the first antennal joint is hardly as long as the head, slightly curved and increasing in thickness towards the tip, the second joint is very small and rounded, the rest are subequal, filiform; the tooth of the mentum is very large, almost equalling the lobes, entire and deeply grooved at the apex; the maxill. palpi are porrected, the second joint is as long as the two following together, the fourth, in both the maxill. and labial ones, is triangular or slightly securiform, being obliquely truncated at the tip; the thorax is elongated cordiform, truncated at the base, the back is elevated, divided down the middle by an impression, the commencement of the elevation forms two knobs at the base; the first tarsal joint is as long as the three following together.

---

Amongst the 300 species of BEMBIDIIDÆ which have been described from almost all parts of the world, with the exception of Australia, it would appear there are also none from Southern Asia. However, since the publication of Lacordaire's "G. d. Col." (1854), in which this statement occurs, various species must have found their way into the Prussian cabinets with my collections from Bengal and this Island.

In the former country the *Carabidæ* are very abundantly represented, and I recollect with pleasure the great variety of them, from the gigantic *Anthia* down to the smallest *Bembidium*, the banks and the sands of the Ganges used to furnish me when leisurely travelling upon this river some years ago,

from August to October, just after the rains. Nowhere have I seen, nor do I expect to see, such swarms of *Cicindela*. Their buzzing flight when disturbed was heard like that of bees. It appeared to me that they did not quit the sands, their favourite haunts, when the tide rose, but allowed themselves to be covered over by the water, as other semiaquatic beetles do. Without especially hunting for them, I brought away with me some ten species, mostly new, and amongst the rest of the *Oarabidæ* as many *Bembidia*.

In this Island, both in the hills and the plains, there is not a bank of a pond, lake or river, which has not, as in more northern latitudes, its *Bembidia*, and, contrary to what one would expect, they appear to be more common in the hot low country than in the cool hill region.

The majority of the species described below may any day be found upon the banks of the Colombo lake. None of the species, (which, as I said, must have found their way with my collections to Berlin and Stettin, and thence perhaps elsewhere,) have, to my knowledge, been described. The descriptions given below, must, therefore, I am fain to believe, be an interesting addition to the literature of this section of the *Oarabidæ*, however inferior they may be to what they might have been had they been produced in Europe had the insects been collated with allied typical species. I have none of those typical representatives of the genus at hand nor is my recollection of them sufficiently distinct to permit of my drawing comparisons between them and the Ceylon insects now before me. Nevertheless, I hope I have set forth the peculiarities of my species with sufficient precision to distinguish them from, or identify them with, any other Cis-Himalayan species that may hereafter be described. As hopeless confusion appears to exist amongst the sub-genera, into which the original genus has been broken up, I have not attempted to refer my species to any of them, for fear of thereby doing anything but throwing additional light on the subject. There is no doubt that many more species exist in this Island, and that indeed, as in the case of the *Sta-*

*phylinidæ*, they will eventually be found to be quite as abundantly represented within the tropics as without. Nothing but their smallness has hitherto prevented their discovery.

### 53. BEMBIDIUM OPULENTUM. N.

*B. oblongum, subconvexum, nebuloso-æneum purpureo-micans, elytris apice sordide testaceis, subtus nigro-piceum, pedibus antennarumque basi testaceis, ore brunneo; long. corp. 1½—2 lin.*

Capite inter oculos 2-sulcato, oculis magnis prominulis, labro fortiter transverso, brevi, integro, mandibulis porrectis, antennis art. 2<sup>o</sup> sequentibus parum brevioribus; thorace transversim cordato antice posticeque truncato, haud emarginato, depresso, margine basique elevato, medio capite parum latiore, apicem versus modice—, basin versus fortius abrupteque angustato, angulis basalibus fortiter truncatis profundeque foveolatis, linea longitud. media abbreviata diviso; elytris ovatis humeris obsolete, profunde striate punctatis, punctis apicem versus obsolete, ante et infra medio utrinque foveolatis, apice lunula magna sordide testacea. Mas latet.

Prope Negombo in ripis Maha-Oyæ, fluvii, specimina nonnulla cepi.

The insect is of bronze color, a purple reflect appearing on the back in irregular patches as the light may fall upon it. The palpi and the base of the antennæ are of yellowish color, the apex of the third joint of the maxill. palpi, however, as well as that of the second, third and fourth antennal joint is brown, of which color is also the remaining part of the antennæ. The second antennal joint is the shortest, the third and fourth are rather longer than the following. The mandibles are rather straight and porrected. The sides of the thorax are almost angular and furnished with a setigerous puncture at the broadest part, that is, just before the middle. There are seven distinct rows of punctures on either elytron and an accessory one along the side of the scutellum, the rows decreasing in length towards the margin and the punctures in depth towards the apex, the first row on either side; changing however, before the apex into a furrow which falls in with that which separates the margin from the rest of the elytron. Before and beyond the middle, in the region of the third row of punctures, is an excavation containing a puncture which is situated upon the third interstice. The excavation nearest the base is the deepest. The apex of the elytra is marked with a spot of



dirty yellowish color prolonged on either, side along the margin, which is here rather broad.

If my memory serves me right, the insect resembles the *Tachypus flavipes*.

#### 54. BEMBIDIUM TRUNCATUM. N.

B. oblongum, valde depressum, brunneo-testaceum, oculis nigris, pedibus, antennis palpisque pallide testaceis; long. corp.  $1\frac{1}{2}$  lin.

Capite magno, thorace quartâ parte prope minore, inter antennis 2-foveolato, oculis mediocribus, antennis art. 3<sup>o</sup> reliquis minore, 4-11 subæqualibus fortius ovatis; thorace breviter cordato, antice posticeque truncato, haud emarginato, basi subquadrato parum prolongato, foveis basalibus obsoletis sed linea basali latitud. profunda lineaque longitud. med. distinctis; elytris oblongis apice *transversim truncatis*, juxta suturam utrinque obsolete 1-striatis, ante et infra med. puncto impressis.

In prov. occid. rarius.

The small size, large head and truncated elytra effectually distinguish this species. The truncated posterior angles of the thorax and the general appearance induce me to consider it allied to the preceding species, at all events to approach nearer to it than to any of the following species. The eyes are rather small for this genus. There are no traces of striæ on the elytra with the exception of one indistinct one along the suture.

#### 55. BEMBIDIUM TROPICUM. N.

B. oblongum, depressum, brunneo-testaceum capite brunneo, elytris dorso nigris cyaneo-micantibus, pedibus, antennis palpisque testaceis; long. corp.  $1\frac{1}{2}$  lin.

Capite inter oculos 2-foveolato-sulcato, oculis mediocribus, antennis fortius filiformibus art. 3<sup>o</sup> reliquis brevioribus; thorace breviter transversim cordato antice posticeque truncato, haud emarginato, basi subquadrato angulis basalibus elevatis sed haud foveolatis, linea latitud. basali profunda, infra lineam strigoso, linea media longitud. diviso; elytris oblongo-ovatis utrinque juxta suturam 4-striatis, striis externis et his apicem versus obsoletis, in striis punctatis, infra marginem stria profunda abbreviata, ante medium et apicem in interstitio 4<sup>o</sup> puncto magno impressis, punctis anteapicalibus piliferis in sulcum ad apicem prolongatis semicirculum formantibus; tarsis 4 anterioribus art. 4<sup>o</sup> subtus apice spinis squamulacis 2 instructo.

In prov. occid. copiosum.

Of light brown color, the head darker, the elytra blackish on the back with a slight blue reflect, the base, sides and apex brownish; the colors being more or less washed into each other no distinct pattern is observable. The brown spot of the apex, however, is generally pretty clearly set off from the adjoining dark part. The paraglossæ are hardly longer than the ligula which itself is rather large. The antennæ are rather hairy and strongly filiform, (not, as in most other species, increasing in thickness towards the apex, the joints growing at the same time more and more oval); joint 3 is the shortest, 2 and 4 are rather longer than the other. The back is impressed with three to four distinct striæ on either side of the suture, the external ones being obsolete as are also the remaining ones towards the apex. There is an additional deep stria within the marginal one, extending from the middle to the apex. Before the middle, and before the apex, there is a puncture situated upon the fourth interstice; the anteapical one of these has a hair in the centre and is prolonged to the apical angle in the shape of a deep, curved furrow. This being the case on either side, the two furrows together form a semicircular figure. The tarsi are each furnished with bristles, especially at the lower margin of the apex of the joints. In the four anterior tarsi joint 4 is furnished at that place with two long bristles the apex of which fits in at the base of the claws. These bristles partake somewhat of the nature of squamulæ by being dilated in the shape of a lancet. I have noticed them occasionally to be bifid at the apex, but I do not think that they are so always.

#### 56. BEMBIDIUM TRIANGULARE. *N.*

*B. oblongum, depressum, testaceum, capite brunneo, elytris sutura fasciæ lata transversali media nigra pedibus, palpis antennisque pallide testaceis his medio fuscescentibus; long. corp. 1. lin.*

Præcedenti affine, ejus capite, thorace et tarsis, differt thorace lineâ basali punctata, infra lineam vix strigoso; elytris utrinque profunde 6-punctato-striatis, striis apicem marginemque versus sensim obsoletis, ante medium in stria 4<sup>a</sup> puncto impresso, stria inframarginali abbreviata et impressione semicirculari apicali ut in præcedente.

Variat colore obscuriore. In prov. occid. communissimum.

Very closely allied to the preceding species; easily distinguished however by size, color—which is generally lighter than that of the former,—and the deeply striated elytra. The insect is, moreover, more common than the former. The prevailing color of the elytra is not, as in the preceding species, black, but it is that of the rest of the body, yellowish, with merely a black suture and black belt across the middle; the edges of this belt are washed together with the color of the adjoining parts. The semicircular impression at the apex of the elytra is the same as in the former, and forms with the abbreviated inframarginal stria, (which is also the same,) a triangular figure, tip down, base open, whence I have derived the name. The head with the antennæ, tarsi, etc. are those of the former, as I have said above.

#### 57. BEMBIDIUM CEYLANICUM. N.

*B. oblongum, depressum, testaceum, oculis nigris, elytris sæpissime fascia media transversali fusca obsoletissima, pedibus, palpis antennisque pallide testaceis; long. corp.  $\frac{3}{4}$  lin.*

Præcedenti simile, ejus capite, thorace et tarsis, facillime tamen distinguendum antennæ apicem versus incrassatis articulis magis magisque ovatis, art. 2<sup>o</sup> sequente longiore, 3-4 subæqualibus subcylindricis, reliquis ovatis; thorace, linea basali fortiter punctata excepta, basi lævi; elytris utrinque juxta suturam leviter 3-punctato-striatis, striis reliquis et his basi apiceque sensim obsoletis, ante et infra medium ad striam 3<sup>m</sup> puncto pilifero impressis, impressione semicirculari apicali ut in præcedente sed stria inframarginali non abbreviata.

In prov. occid. communissimum.

Easily distinguished from the former, to which it is allied, by size, color and the incrassated antennæ. The elytra, moreover, shew only three distinct striæ on either side of the suture, two more, however, being just traceable. They are obsolete at the base, apex and towards the margin. Within the latter there is an additional deep stria, entire, and not, as in the preceding two species, only from the middle to the apex. The semicircular impression of the apex, however, is the same, so are the tarsi, etc.

## 58. BEMBIDIUM KLUGII. N.

*B. ovatum*, convexum, æneum, elytris maculis 2 subapicalibus rufo-flavis, subtus piceum, pedibus dilutioribus, tibiis, tarsis antennarumque basi testaceis; long. corp.  $1\frac{1}{2}$  lin.

Capite inter oculos longitud. 2-impresso, oculis maximis, antennis art. 2<sup>a</sup> sequentibus parum brevior, his subæqualibus; thorace transversim ovato, antice posticeque truncato, haud emarginato, basi abrupte angustato quadrato, angulis basalibus profunde foveolatis inter foveis punctis 1-seriatim impresso, linea media longit. subtili diviso; elytris ovatis apicem versus leviter angustatis, utrinque profunde 7-punctato-striatis, basi lævi, striis apicem versus obsoletis, ante apicem inter strias 3-6 macula orbiculari rufo-flava apiceque impressione semicirculari.

In prov. occid. et central., hic usque alt. 3500 ped., non infrequenter legi.

This species ascends from the sea level of the Western Province to an elevation of 3,500 feet in the hills, where I have not unfrequently met it upon the sandy banks of the Pundalu-Oya, a rocky mountain-stream in the district of Kotmalé. Its robust, ovate, convex shape places it at once in a different division from any of the former. It is of bronze color with two orange colored spots behind; the mouth is brown with the exception of the palpi, which, together with joints 1 and 2 of the antennæ, are yellowish, joint 3 of the maxill. palpi, however, is of the general color of the mouth. The labrum is square and entire, the second antennal joint is rather shorter than the rest. The thorax is transversely ovate, that is to say, its greatest width is at the middle, not as in a cordate thorax, before it, the foveæ are connected by a series of punctures which gradually deepen towards the centre, the longitudinal divisional line is also deeper at the apical extremity than at the other parts. The elytra are impressed with seven deep furrows on either side deeply punctured at the bottom. These furrows decrease in length towards the margin and in depth towards the apex, with the exception, however, of the first on either side, which go straight down to the apex. At the latter comparatively smooth place is the semicircular impression noticed in the three preceding, and to be noticed in all the following species. The base of the elytra is smooth. There,

are no traces of punctures, such as are usual in the region of the third or fourth interstice, observable. The lower side of the insect is of pitch color, the basal part of the legs and the thighs are lighter and the tibiæ and tarsi quite light.

#### 59. BEMBIDIUM EBENINUM. N.

*B. ovatum*, convexum, nigrum elytris ante apicem maculis 2 rufo-flavis; subtus piceum, pedibus palpis antennisque testaceis, his apicem versus obscurioribus, reliquis oris partibus brunneis; long. corp.  $1\frac{1}{4}$  lin.

Præcedenti affine, ejus capite et thorace, facillime tamen distinguendum præter colorem antennis fortius filiformibus, elytris lævibus juxta suturam utrinque 2-striatis, striis basi abbreviatis, externa apicem versus obsoleta, ante et infra medium leviter foveolatis, ante apicem macula ovata rufo-flava, infra marginem stria profunda apiceque semicirculariter impressis.

In prov. occid. non rarum.

Very closely allied to the former and equally pretty. Head and thorax entirely those of the former, the antennæ, however, are more filiform and the divisional line of the thorax is not deepened at the apical extremity. The elytra are smooth, with only two striæ along the suture on either side, the rest not being even traceable. Both these striæ are abbreviated at the base and the outer one becomes obsolete towards the apex; the inner one, however, goes fully down to the apex, and falls in with a deep inframarginal furrow which is wanting in the preceding species. Before and beyond the middle is a small impression, before the apex are two oval spots of orange color; the apex has the semicircular impression noticed in the preceding species.

#### 60. BEMBIDIUM ORIENTALE. N.

*B. fortiter ovatum*, convexum, æneum elytris maculis 4 magnis flavis apice sordide subtestaceis subtus piceum abdomine brunneo, pedibus, antennarum basi palpisque pallide testaceis; long. corp.  $1\frac{1}{4}$  lin.

Capite inter oculos longitud. 2-impresso, oculis maximis, antennis, art. 3-4 subæqualibus, 2<sup>o</sup> his vix brevioribus; thorace transversò leviter ovato, antice posticeque truncato, haud emarginato, leviter angustato, basi quadrato, 2-foveolato, inter foveis punctis 1-seriatim impressis, linea longit. media diviso; elytris ovatis apicem versus fortius angustatis, utrinque profunde 7-striatis, basi lævi, striis marginem apicemque versus

*magis magisque obsoletis*, in stria 3<sup>a</sup> ante et infra medium puncto impressis, infra humeros inter striam 5<sup>m</sup> et marginem macula ovata, ante apicem inter striam 2<sup>m</sup> et marginem macula obliqua flava, apice sordide obsoleteque testaceis, hic semicirculariter et infra marginem stria profunda impressis.

In prov. occid. commune.

Easily distinguished by its strongly oval shape, the thorax being hardly contracted at the base and no doubt belonging to a different sub-genus from the preceding and the following. The head is quite that of *B. Klugii*. The antennæ have the second joint hardly shorter than the third and this and the following subequal, joints 1-4, are of light yellowish, the rest of brown color, joint 3 of the maxill. palpi is. of dark, the remaining ones and the labial palpi of pale yellowish, color. The labrum is square, entire, and, with the rest of the mouth, brown. The mandibles are furnished with 3-4 small teeth below the middle. The ligula is broader than in any of the other species. The thorax, besides in shape, is distinguished by having the foveæ removed from the basal angles towards the centre. The elytra are impressed with seven distinct striæ on either side, the first of which runs down to the apex where it falls in with the inframarginal one, the rest decrease in length towards the margin and in depth towards the apex, beyond the seventh another one is just traceable, beyond this there is a deep inframarginal one. The apex is impressed with the semicircular figure which distinguishes all the species here enumerated, with the exception of *B. opulentum* and *truncatum*. The color of the insect is a dark bright metallic green variegated with four large yellow spots on the elytra; two of these are near the shoulder and of oval shape, the other two near the apex and oblique; the apex is of a dirty yellowish color. The lower part of the insect is of pitch color, lighter towards the apex, the legs are yellowish, darker towards the base.

#### 61. BEMBIDIUM EMARGINATUM. N.

*B. ovatum*, convexum, piccum, capite dilatiore, elytris ante apicem maculis 2 rufo-flavis, subtus brunneum, pedibus, antennarum basi palpisque testaceis; long. corp. 1 lin.

Capite antice fortius acuminato, fronte utrinque profunde pluries-sulcata, oculis mediocribus prominulis, labro profunde subangulate emarginato, antennis art. longitudine subæquali; thorace breviter cordato antice posticeque truncato, non emarginato, basi quadrato foveis basalibus lineaque longit. media fere obsoletis, linea basali latitud. tamen distincta; elytris ovatis juxta suturam utrinque 2-striatis, stria externa basi apiceque abbreviata, ante et infra medium puncto obsoleto impressis, ante apicem macula orbiculari rufo-flava apiceque sordide obsoleteque testaceis, hic semilunariter et infra marginem stria profunda impressis.

Variat colore dilatiore. In prov. occid. rarum.

This and the two remaining species are allied to each other, and probably belong to the subgenus *Lopha*. However, I am less sure of this with regard to the present species than with regard to the two following.

The head is pointed in front, and the labrum—an unusual occurrence—deeply notched. Two deep furrows run from the clypeus straight across the forehead to the vertex, and from their base other smaller ones radiate towards the eyes. Joints 2-5 of the antennæ, which, in almost all cases, are of unequal length, are not so in the present; the first two or three joints are yellowish, the rest are brown. Joint 3 of the maxill. palpi is dark, the remaining ones and the labial palpi yellowish. The elytra are impressed with two striæ on either side of the suture, the remaining ones are just traceable. The one next to the suture goes straight down to the apex, where it falls in with a deep inframarginal furrow; the second is as usual, abbreviated. The apex is impressed with the semicircular figure, and there are two punctures on either side.

## 62. BEMBIDIUM ORNATUM. N.

*B. ovatum*, subconvexum, brunneum, elytris maculis 4 flavis, pedibus, antennis palpisque pallide testaceis, long. corp. 1 lin.

Præcedenti simile, prætercolorem facillime tamen distinguendum corpore graciliore, fronte utrinque 2-sulcata, labro integro, elytris infra humeros et infra marginem utrinque macula orbiculari flava, punctis nullis.

Variat colore obscuriore et dilutiore et sæpius apice sordide testaceo. In prov. occid. commune.

Easily distinguish from the preceding species with which it agrees in all other respects; no striæ are, however, traceable

upon the elytra between the two near the suture and the inframarginal furrow.

63. *BEMBIDIUM SCYDMÆNOIDES*. *N.*

*B. ovatum*, convexum, obscure brunneum, elytris maculis 4 magis minusve obsolete dilutioribus, pedibus, palpis antennarumque art. 2 primis testaceis, his apice reliquisque obscurioribus; long. corp. 1 lin.

Præcedenti simile, corpore robustiore, fortius ovato magisque convexo, thorace basi fortius quadrato facillime distinguendum.

In prov. occid. communissimum.

VIII. *MEGARISTERUS*, *n. g.* *N.*

Fam. CARABIDÆ.

Trib. HARPALEDÆ.

Corpus oblongum, depressum, glabrum. Caput mediocri antice obtusum. Mentum profunde subquadrate emarginatum, edentatum, lobis extus rotundatis apice acuminatis. Ligula minima oblonga paraglossis magnis connatis eam totam amplexantibus antice rotundatis subcordate emarginatis. Palpi maxill. art. ultimo subcylindrico apice magis minusve angustato truncato, lab. eodem obovato truncato. Labrum transversum antice posticeque angustatum, margine anteriore profundius emarginato setoso. Clypeus emarginatus. Mandibulæ validæ trigonæ apice leviter arcuatae, dextera mediocri labra oblecta apice acuminata medio 1-dentata, sinistra robustiore porrecta (hinc *n. g.* *Megaristerus*) apice obtusa medio 2-dentata. Antennæ humeros parum superantes, filiformes, art. 2<sup>o</sup> sequente parum brevior, reliquis subæqualibus. Thorax rotundato-cordatus, postice angustatus angulis rotundatis, antice leviter emarginatus angulis distinctis. Elytra parallela apice rotundata. Pedes ut in *g. Acupalpus* tarsis maris 4 ant. tamen 1<sup>o</sup> subtus nudo.

Victus Harpalorum.

Apparently closely allied to *Amblystomus*, differing, however, in the sculpture of the tarsi, the antennæ, labrum and palpi, and, as in the diagnosis given by Lacordaire in his *g. d. Col.* the paraglossæ of *Amblystomus* are simply said to be rounded in front, a further distinction would appear to reside in the notch which exists in that part of the paraglossæ of my genus *Megaristerus*. Also allied to *Acupalpus* the sculpture of the tarsi being exactly the same; in saying which I bear particularly in mind that the intermediate ones of the male are hardly dilated. From this genus however, it is effectually dis-



tinguished by the shape of the ligula. From both *Amblystomus* and *Acupalpus*, the present genus moreover differs in the *vestures* of the four ant. tarsi of the male, *the first joint being naked below* and in the mandibles, the left one of which is much larger and plumper than the right one, protruding from under the labrum, whilst the latter is hidden by it, the former is at the same time obtuse at the apex whilst the latter is pointed. In the *M. Indicus* this peculiar construction is hardly striking, but in the other two species it is very noticeable, and imparts a curious appearance to the head of the insect.

#### 64. MEGARISTERUS MANDIBULARIS. N.

*M. piceo-niger* leviter metallescens, subtus brunneus, antennis, tibiis tarsisque testaceis, ore brunneo; long. corp. 1½-2 lin.

Capite inter antennas 2-foveolato, mandibula sinistra robustissima porrecta, dextera mediocri labro oblecta; thorace basi 2-foveolato, linea longitud. utrinque abbreviata media diviso, antice lunate impresso; scutello majore; elytris obsolete striatis, striis juxta suturam distinctioribus, cum thorace parce subtiliterque punctulatis, inter med. et apic. ad striam 2<sup>m</sup> puncto impresso.

Prope Colombo rarus.

#### 65. MEGARISTERUS STENOLOPHOIDES. N.

*M. brunneo-piceus* elytris obscurioribus metallescentibus maculis 3 flavis, margine suturæque apice brunneis, pedibus, antennarum basi palporumque apice pallide testaceis, ore, mandibulis brunneis exceptis, testaceo; long. corp. 1½ lin.

Præcedenti similis corpore robustiore minus depresso et colore facile tamen distinguendus. Differt præterea palpis max. art. 4<sup>o</sup> minus distincte, lab. eodem fortius truncato; thorace magis transverso basi obsolete ruguloso; elytris profundius striatis, puncto ad striam 2<sup>m</sup> fere obsolete, cum thorace haud punctulatis, maculis 4 subobliquis flavis: 2 humeralibus in interstitiis 5-6, 2 subapicalibus in interstitiis 3-4.

Prope Colombo rarus.

#### 66. MEGARISTERUS INDICUS. N.

*M. obscure viridi-aeneus* elytris maculis 2 humeralibus obliquis pustulisque 2 subapicalibus flavis, subtus brunneus tibiis tarsisque testaceis, antennarum basi oreque brunneo-testaceis; long. corp. 1½ lin.

Differt a *M. mandibulari* mandibula sinistra altera vix robustiore, elytris infra humeros inter marginem et striam 2<sup>m</sup> macula obliqua intus

angustata ante apicem in interstitio 3<sup>o</sup> postula parva flavis, apice fortius quam in præcedente rotundatis.

Prope Colombo mihi, Maderaspatani a Dam. Hon. W. Elliott specimina nonnulla nocte ad lumen capta.

IX. SPATHINUS, *n. g.* *N.*

Fam. CARABIDÆ.

Trib. POGONIDÆ.

Corpus obovatum, sub-convexum, glabrum. Caput mediocre antice trigonum, oculis magnis semiglobosis prominulis, collo brevi. Mentum transversum profunde quadrate emarginatum, dente sat forti acuto, lobis intus inter med. et apicem leviter oblique truncatis, extus rotundatis, apice acuminatis. Ligula minuta elongata, paraglossis latis connatis eam hand multo superantibus apice intus oblique truncatis subacuminatis. Palpi art. ultimo conico acuminato, max. art. 3<sup>o</sup> invertito ultimo æquali, lab. eodum robustiore. Labrum quadratum antice profunde emarginatum angulis ant. rotundatis. Mandibulæ porrectæ trigonæ apice acuminatæ basi dentatæ. Antennæ sat robustæ humeros parum superantes art. 2-3 subæqualibus, obovatis. Thorax transverse subquadratus antice lateribus leviter rotundatus, angulis subrectis. Elytra ovata apice rotundata. Pedes anteriores tibiis profunde emarginatis, tarsis moris art. 1-3 leviter dilatatis subtus squemulis munitis, art. 1<sup>o</sup> subcylindrico 2-3 subrotundatis, 4<sup>o</sup> subtrigono, unguiculis simplicibus.

Victus *Bembidiorum*.

Apparently closely allied to *Trechus* and an aberrant form of the same tribe to which the latter genus belongs. The mentum and palpi appear to agree entirely. The insects differ, however, in the structure of the ligula (which in *Spathinus* is entirely that of a *Bembidium*), and the sculpture and vesture of the ant. male tarsi. In spite of the latter anomalies, the preeminently characteristic shape of the palpi convinces me that the insect must find a place where I have put it. It is also closely allied to my genus *Ochtheophilus*, differing from it, however, in the ligula, palpi and labrum. The generic name "*Spathinus*" signifies 'a staggard,' and I have chosen it with regard to the shape of the terminal joint of the palpi. The insects are common throughout the South-West and West of the Island, where they live in the manner of the *Bembidia*, under decaying vegetable matter, upon the banks of lakes, and rivers, &c.

67. *SPATHINUS NIGRICEPS*. *N*.

*S. Alatus*, tenuiter hirsutus, brunneo-testaceus, capite nigro, elytris apice fuscis, ore, antennis pedibusque testaceis; long. corp.  $1\frac{1}{2}$  lin.

Capite inter antennas profundius 2-foveolatus, fronte medio leviter depressâ; thorace lævi linea longit. media diviso; elytris juxta suturam obsolete striatis.

68. *EUPLYNES DOHRNII*. *N*.

*E. ovatus*, subconvexus, rufo-testaceus, oculis nigris, elytris viridibus, femoribus apice tarsisque geniculis fusciscentibus; long. corp. vix  $4\frac{1}{2}$  lin.

Capite inter antennas bifoveolato; antennis art. 2<sup>o</sup> brevi, reliquis subaequalibus; palpis art. ultimo sub-elliptico truncato, labialibus elongatis; thorace breviter transversim cordato antice posticeque truncato, longitudine sesqui latiore, depresso, lateribus basique elevato, hic leviter bifoveolato, angulis basalibus subrectis leviter rotundatis, linea med. longitud. diviso, subtiliter transversim ruguloso; elytris ovatis leviter dilatatis thorace duplo fere latioribus, striatis, in regione basali in stria 3<sup>a</sup>, ad et infra medium in stria 2<sup>a</sup> puncto impressis, in regione media utrinque depressis ante apicem leviter angustatis et sinuatis, apice levissemi transversim truncatis angulo interno in spinam producto; pedibus tibiis fortiter tarsisque 4 posticis dorso modice costatis.

In campis silvisque prov. occid. et in montibus prov. central. usque alt. 4000 ped. sub vegetab. per occasionem copiose legi.

This insect frequents localities of a very different nature: I have taken it in great abundance in the Negombo district in hot, sandy, fields, under heaps of weeds, &c.; but I have also taken it on the banks of the Colombo lake, and in the damp forests of Pussellâwâ, 4,000 feet above the sea, under fallen trees. Its favourite haunt, however, appears to be the former description of locality. It would appear to be very distinct from the *E. Cyanipennis* described by Schmidt-Göebel in his "Col. Birm." in thorax, sculpture of apical part, and position of punctures of elytra, costated four post. tarsi, &c. On the other hand the curious depression of the elytra, which has much the appearance of being accidental, is the same. It occurs also in my genus *Anchista*. I am not quite satisfied with the description of the ligula and tarsi as given by Schmidt-Göebel. The former I should call "truncated at the apex, anterior

angles strongly rounded off." In the insect before me it is certainly not rounded in the middle : if anything, it is rather the contrary. The tarsi I should describe thus :—"Joints 1—4 of two ant. male tarsi dilated ; joint 1 nearly as long as the two following together, sub-cylindric ; joint 2 nearly as long again as the following, elongate-trigone ; joint 3 sub-trigone ; joint 4 (in all tarsi) bilobed ; joints 1-3 furnished below with two series of lamellated papillæ fenced in by bristles ; joint 4 densely penicillated ; claws simple."

I take this opportunity to add a general remark. The author above quoted at the end of the description of his *E. Cyanipennis*, quotes a passage from Helfer's Burmese Journal, implying that the species lived exclusively upon trees, and *that most of the Carabidæ of that country had the same habit*. The latter part of this observation I feel inclined to look upon as a rash and unjustifiable assertion on the part of Helfer. There can be little doubt (and the above is an additional example) that the *Carabidæ* of this Island have much resemblance to those of Burma. Still my long experience in it has not furnished me with any instances of any of them living *upon trees*, with the exception of the *Tricondylæ*, *Collyres* and certain *Cicindelæ*. The *Casnoniæ* and *Ophioneæ* are in the habit of ascending grasses and low herbs, and certain *Lebiidæ* and genus *Catascopus* live under the bark of trees. This is all. As to the insect described above, although it appears to adapt itself with facility to a variety of physical circumstances, and although it takes occasionally to its wings and flies into houses in the evening, I have never found it *upon trees*.

---

NEW AND LITTLE KNOWN SPECIES OF CEYLON  
NUDIBRANCHIATE MOLLUSCS, AND  
ZOOPHYTES.

By E. F. KELAART, M.D., STAFF SURGEON, F. L. S.

---

HAVING, in the course of my Military service, been now for the third time stationed in Trincomalie, in Medical charge of the European Troops in that Garrison, and still finding that there is nothing like the careful study of God's works to divert the mind from the contemplation of diseased organic bodies, especially in this unhealthy and monotonous station; I have again resumed the researches of my leisure hours, which never fail to draw from me an earnest prayer that my health may be spared long enough to conclude these labours in this and other parts of the Island.

A recent visit to England made me acquainted with the value of the aquarium, and with the interesting researches of Messrs. Alder and Hancock, of Gosse, Johnson, and others, among the soft, gelatinous, marine animals found in European seas, which have been so much neglected by Indian Naturalists, owing to the difficulty either of observing their natural habits, or of preserving their forms. The curiosity thus excited was immediately increased, when, after several years absence, I was again in sight of the magnificent harbour and bays of Trincomalie. While some of my Ceylon friends contemplated my return to Trincomalie as a great evil, I became reconciled to my destination from an inward feeling—and I hope not an unworthy one—that I was again sent here, for a good and useful purpose.

It is now nearly two years since I returned to Ceylon, and I have every reason to feel thankful, that my residence in Trincomalie

has enabled me to prosecute researches in more than one unexplored field of Natural History. I had for my guide the example of those great and good men, who deign to look upon even my labours as worthy of encouragement, and who do not consider the pursuit of the Naturalist as incompatible with the duties of a Military Surgeon. Dr. Johnson, himself a successful Medical practitioner and zealous Naturalist, (in his celebrated work on British *Zoophytes*,) observes, in his remarks on Doctors who are also Naturalists, that "that very activity of mind and perspicacity which originated and upheld their sagacity and success as practitioners, were sure to carry them far in whatever side-path the natural bent of their taste led them, for the occupation and entertainment of the leisure hours which the *busiest must have, or may create. Idleness has no leisure.* \* \* \* There never was a time when it was necessary to vindicate, to any but the ignorant, the erratic excursions of medical men into the fields of science and literature; for assuredly the rank which the profession, as a body, has taken and holds in public estimation, depends for its patent, in part at least, on the scientific and literary character of its professors; and by continuing to support that character they will best secure it from the vulgarity of a common mercature, or the selfishness of a venal quackery."

My earliest researches, since my return to Ceylon, were directed (with the aid of the microscope) to those minute forms of animal and vegetable life called animalculæ, and *Diotomaceæ*. I have already communicated to another channel the observations I have made among these interesting microscopical creatures, found in fresh and sea water. In this paper, I propose to communicate to the Ceylon Branch of the Royal Asiatic Society, my researches among some of the least known, but most interesting, species of marine animals.

Finding that scarcely anything is known of the many naked Molluscs of this part of the Indian Ocean, I have availed myself of the present favorable opportunity offered by the Ceylon Government, for the investigation of the Natural History of the Pearl Oysters, to extend my researches also to a numerous family

of *Mollusca* inhabiting these seas, which though not productive of pearly gems, or affording specimens for cabinet collections of Conchologists, or of amateur collectors, have attracted considerable attention in Europe, more especially since the publication of the splendid work of Alder and Hancock on the British *Nudibranchiata*.

The marine shells of Ceylon have long been known to the Naturalist, and they are also familiar to many in Ceylon, but the soft sea nymphs, or slugs, whose perishable charms often rival the more lasting beauties of the finest shell, had scarcely ever been noticed by any Naturalist or friend in the Island, till I had placed these creatures in the Vivarium. They have not only afforded amusement and instruction to myself, but, I hope, to others also, who have frequently seen these interesting creatures in their new homes. I must confess that some of my visitors were disappointed at the slimy nature of these animals, and failed to appreciate the beauty of many of my pet specimens. Others, however, more alive to the beautiful and to the wonderful works of God, did not despise the sea-born slugs, because they were so snail-like in appearance, and, like the land slugs, destitute of shells. Even the native shell divers, who procured me most of the living specimens, expressed their astonishment at the newly unfolded beauties of these "*Addai*,"\* or slugs, which they found crawling on rocks and sea-weeds; but it was not till the full formed *Doris*, or the sweet little *Eolis*, expanded their tentacles and plumose gills in the glass Vivarium, that these 'men who go down to the deep' became aware, that the creatures which they so much despise are among the most elegant objects of the sea, and that, although a shell will preserve its colour for an almost indefinite period, the rich and variegated colours of these semi-gelatinous creatures, though shorter lived, are not less charming, or less worthy of admiration. It may, therefore, be hoped, that the interest recently created will continue to be attached to the naked *Mollusca* of Ceylon, and, that, in a few years, they will be as well known to

---

\* T அட்டை 'sea-slug.'

the Naturalist as the European species. Although it may be long before we shall find an Alder or a Handcock to pourtray gracefully, and faithfully record their characters and habits, still it will always be gratifying for me to feel, that I was the pioneer to the labours of others more competent to do justice to the Ceylon *Nudibranchiata*.

It has always been my endeavour, (though, I must own, often unsuccessfully,) to describe in familiar language to my friends in Ceylon, the Natural History of animals found in the Island, and therefore, if I have not attained this object in the following pages, it will not be from the want of a wish to impart to others some of the pleasure I have derived in such congenial pursuits or from the absence of a desire to be amusing as well as instructive.

Popular accounts of the Natural History of a country generally follow a scientific one. But I shall endeavour to combine both in one communication, for I cannot but suppose that, among many inquirers, there will be found even a few who are anxious to dive deeper into the characters of an animal than its colour or form. Having this object in view, I cannot introduce the following descriptions of sea slugs, or sea nymphs, by a more intelligible and useful preface, than an abridged description of the Anatomy and Physiology of the Class *Nudibranchiata*, given in the English Cyclopædia ; promising, in the course of my own descriptive account of the species found in Trincomalie, to detail faithfully their habits and characters.

### NUDIBRANCHIATA.

A family of *Gasteropodous Mollusca*, characterised by the possession of distinct, external and uncovered gills. The species of the family are all marine, and with few exceptions small in size. They are sometimes, with other forms of animals, called sea-slugs, arising from the fact that, like land slugs, they are destitute of shells. Their body is usually elongated and soft, and attached throughout its whole length to the foot, or disc, upon which they crawl. They are not unfrequently covered with a cloak, which in some is strengthened with calcareous spicula. The head is anterior, and frequently indistinct, having one or two pairs of tentacles, the upper pair of which are placed on the cloak when it is present.



and behind them the eyes are situated. But the characteristic peculiarity of these Molluscs is the appendages that constitute their breathing organs, placed upon the back, always symmetrically, in plumes, tufts or papillæ, either forming a circle on the central line, or arranged in rows upon the sides.

None of the Nudibranchiate *Mollusca* appear to have been known to the ancients, and even up to the time of Linnæus they remained, with one or two rare exceptions, entirely unnoticed. It was not until the appearance of the celebrated "*Memoires*" of Cuvier, in the *Annales du Museum*, that much attention was drawn to this subject. Since then, Lamarck and Blainville contributed something to the knowledge of their physiology and relations, but not much to the number of species.

Although little had been done up to this time by British Naturalists in augmenting the species of this beautiful family, they have been, since, the subjects of most accurate and fruitful research; and the monograph now publishing by the Ray Society, on the "*British Nudibranchiate Mollusca*," may be regarded as one of the most remarkable contributions made to the literature of Natural History during the present century. Continental naturalists have also added several new European species during the last half century.

With the imperfect knowledge of foreign species that we yet possess it is scarcely possible to arrive at any satisfactory conclusion concerning the general distribution of the *Nudibranchiata* in the different regions of the globe. The tropical forms are, as usual, larger and more brilliantly coloured than those of colder climates, but the notices of extra European species are so scanty, that we cannot form any idea of their numerical preponderance. \* \* \* \* It cannot be doubted that a great deal of the apparent deficiency of other genera, in comparison with the *Dorididae*, in foreign countries, arises from the want of proper examination, and from the little attention paid by collectors to the less conspicuous forms.\*

In 1841, the celebrated Naturalist, M. Sars, announced the discovery, that these little creatures undergo a metamorphosis, having on their extrusion from the egg a very different form and character from those which they are afterwards destined to assume. In this first stage of their existence, they have the appearance of small animalcules, swimming freely through the water by means of two ciliated lobes, and have their body covered by a nautiloid shell furnished with an operculum. Up to

---

\* Having paid this attention to "less conspicuous forms," I am enabled to add considerably to several genera.—E. F. K.

that time nothing approaching to a distinct metamorphosis had been known to exist in any of the true Molluscs.

The *Nudibranchiata* exhibit a high state of organization. They are all provided with a powerful muscular buccal apparatus, which has, in some instances, appended to it a gizzard. The oral aperture is guarded by fleshy lips, and the mouth is furnished with a tongue, bearing a spiny prehensile membrane, and occasionally with lateral corneous jaws.

The oesophagus, stomach, and intestines are well marked; the former is generally short, and passes from the upper surface of the buccal mass. The stomach is frequently buried in the liver. The intestine is always short.

The liver presents two great types of form. In the *Dorididae* and *Tritonidae* it is entire (excepting in *Scyllaea*, where it is broken up into 6 or 7 globular masses), occupying its normal abdominal position; in the *Eolididae* it is more or less diffused.

All the Nudibranchs are hermaphrodites, each individual being furnished with male, female, and androgynous parts. These organs, taken together, are very bulky, and occupy the greater portion of the abdominal cavity. They communicate with a common vestibule, opening upon a nipple-like process on the right side of the body, and always below the mantle, when it is present.

The organs of circulation and respiration consist of central organs of propulsion,—a systematic and portal heart,—arteries, veins, and sinuses or lacunes; and of laminated, branched, or papillose branchiæ; arranged either on the medial line, or along the sides of the back. The flow of blood is rapid; the pulsations of the heart varying, in the different species, from 50 to 100 in the minute.

The nervous system presents a high degree of concentration, perhaps higher than in any other group of *Mollusca*,—and is divided into two very distinct portions:—one, the cephalic or excito-motor; the second, the splanchnic or sympathetic; these two portions intercommunicate at several points.

All the Nudibranchs are provided with auditory capsules. Eyes are also universally present. The dorsal tentacles are the organs of smell, and, judging from their great development, this sense must be more acute in most of the Nudibranchs than it is in any other Mollusc, with the exception perhaps of *Nautilus*. Touch undoubtedly resides everywhere in the skin, but it is specialised in the oral tentacles and parts about the mouth. The lips and channel of the mouth are probably the seat of taste.

Their ten city of life, when kept in confinement, varies much in the different species, but is greater than in many other marine animals.

Though patient and long-suffering in the endurance of hunger, they are very voracious. The greater number of them are carnivorous ; living principally upon Zoophytes and Sponges. The Eolides do not scruple occasionally to devour the weaker among their own brethren.—*Abridged from English Cyclopædia.*

Hoping that the foregoing anatomical and physiological account of the *Nudibranchiata*, will draw more than ordinary attention to this family of marine creatures (found on almost every rock and sea weed), I shall proceed to give a descriptive account of upwards of a hundred species of marine-animals, including Sea-anemones and *Planaria*, found in the harbour, bays, and coves of Trincomalie. I cannot but regret, that not having with me Ruppel and Ehrenberg's work on species found in the Red Sea, I am not able to speak positively of *all* those herein described as being new to science. Some may, perhaps, have already been described by earlier observers, which, if ascertained to be the case, I shall only be too glad to take the earliest opportunity of acknowledging.

In concluding these prefatory remarks, I have to express my personal obligations to those authorities who have retained my military services in Ceylon, thereby enabling me to resume my Zoological labours, which were precipitately and unexpectedly shortened by my removal from the Island.

*Trincomalie,*

*1st November, 1857.*

## CEYLON NUDIBRANCHIATA MOLLUSCA.

(NAKED MOLLUSCS.)

---

Sub-Kingdom.	MOLLUSCA.
Class.	GASTEROPODA.
Order.	NUDIBRANCHIATA.
Fam.	DORIDIDÆ.

Branchial plumes surrounding the vent on the medio-dorsal line.

Sub-Family. DORIDINÆ. With a cloak.

Genus DORIS. *Linnaeus*.

Animal oblong, covered by a mantle ; four tentacles, two superior or dorsal, clavate or conical, retractile within cavities, sometimes slightly sheathed. The two inferior or oral tentacles placed on each side of the mouth, sometimes absent or replaced by flat appendages ; eye specks immersed behind the dorsal tentacles, not always visible in the adult ; lingual membrane with numerous lateral teeth ; rachis often edentulous ; stomach simple ; liver compact ; skin strengthened with spicula, more or less definitely arranged.

---

DORIS GLORIOSA. *Kel.*

Synonym. DORIS MARGINATA? *Leuckart.*

Body nearly 3 inches long ; oblong, of a pinkish colour minutely dotted with red and white. Mantle large, oval, broad, when expanded entirely covering the foot. Back mottled with pink, red and yellow, and minutely punctulated with red and

yellow, edged broadly with white, then by a rich broad red line; adjoining this is a whitish space, and carried round the mantle, near the body, is a still more brilliant blood red line, with internal club-shaped prolongations of the same beautiful purple red colour. Interspace and for about a quarter of an inch of breadth of the back, the mantle is again whitish, with shades of purple and yellow nearer the beautifully mottled back. The underside of mantle has also a broad white edge, the rest brilliantly variegated with dotted purple, yellow and red splashes. Branchiæ 7 or 8, large, branched; each rising from a separate cavity in a circle about half an inch from a protruding yellow coloured anal orifice. Plumes roseus, with red midribs. Dorsal tentacles large, clavate; apex pointed, slightly truncated, on inner edge laminated; colour pinkish and spotted yellow; ridge of cavity spotted with yellow and red. Head large, protruding nearly three-quarters of an inch from mantle. Mouth near foot, situated in the centre of an oval projection, and on each side a long broad toothed leaflet or oral appendage, red and dotted like the head. Foot long, broad, with parallel sides, rounded and transversely split in front. It has a broad lemon coloured edge with transverse striæ; the rest pinkish red, not spotted; a dark purple spot in centre given by the internal viscera.

This is by far the most beautiful species of *Doris* or sea nymph I have ever seen, and none but a good artist could do justice to its resplendent beauties. The large ample surface of the mantle, with its soft, snowy white undulating edge, is best seen when the animal is swimming, and reflecting in the water the rich red folds near the golden speckled back, on which is placed a broad circle of rosy coloured feathery tufts. The live specimen, of which the above is but a faint description, was found under corals in low water near Fort Frederick. In another specimen from the same locality, the white edge of the mantle was replaced by a rich crimson red, which coalesced with the inner red line, leaving a faint white line. Indeed, it is a question which of the two varieties looked more beautiful; at night, however, the palm of beauty was awarded to the red margined specimen. They both lived for some days in

a vivarium. When at rest, the mantle was turned inwards towards the back ; in this position the white and red lines were hidden by the broad rolls on each side, displaying the rich profusion of red and yellow dotted splashes and undulating lines of the under surface of the mantle. In fact, it then looked like another species, but it is only when the mantle is fully expanded and floating on the water, that the unrivalled charms of this beautiful sea nymph is seen to perfection. In the young, the mantle extends round the head, and may be mistaken for a distinct species. I have not had an opportunity of seeing the spawn of this species.

If this splendidly coloured sea nymph is identical with Leuckart's species, found in the Red Sea, and named *Doris marginata*, I should still prefer retaining the name I have given it, as "*marginata*" would apply, equally as well, to several other species as to this.

#### DORIS MACCARTHYI. Kel.

Body nearly  $2\frac{1}{2}$  inches long ; dusky grey. Mantle long, narrow, dusky grey ; bordered with a bright blue line ; edge crenulated, wavy. Dorsal tentacles long, conical, obtusely pointed ; laminated obliquely, for nearly two-thirds of its length ; of a pale blue colour with white streaks. Oral tentacles white, short, broad and rounded. Branchial plumes 12 to 15 ; irregular, most of them of unequal length ; pinnated, and a few trifurcated ; others have a small cluster of plumes rising from the middle or extremity. Foot white, and nearly as long as the mantle.

This curious, but elegant species is semi-gelatinous ; and resembles a *Goniodoris* from its narrow mantle, which scarcely covers the foot ; the body is almost exposed.

I have dedicated this beautiful species to one who has always encouraged my pursuits in the field of Natural History. To Sir Charles MacCarthy, the Colonial Secretary of Ceylon, I feel grateful for that assistance which his position in the Island enabled him to give me, whenever required ; and I also feel

thankful to him for the warm interest he has taken in my employment as Naturalist, to investigate the Natural History of the Pearl Oysters, which has so abruptly been brought to a conclusion by my professional services being required in another part of Her Majesty's dominions,—the rebel polluted land of India.

#### DORIS CÆLESTIS. *Kel.*

Body white,  $2\frac{3}{4}$  inches long ; flattened. Mantle coriaceous, white, clouded with dark purple minute rings, confluent or continuous with lighter coloured purple rings, set more widely apart. Dorsal tentacles white, long ; apex clavate, lamellated, slightly truncated on the superior edge ; pale green, tipped with orange ; margin of sheath orange or golden. Oral tentacles long, acutely pointed ; white, minutely speckled with purple. Branchial plumes 6, long, tripinnated ; whitish, ribs purplish brown, edge of cavity orange. Foot white, shorter than mantle ; grooved ; lower lamella notched.

This beautiful purpled clouded *Doris* is of very retiring habits ; scarcely ever seen moving. Obtained in August and September from rocks in Back Bay. Ova white, in three or four broad coils.

#### DORIS FUNEBRIS. *Kel.*

Body nearly  $1\frac{3}{4}$  inch long ; oblong, convex ; of a waxy white colour, and spotted black. Mantle coriaceous, granular ; of an ivory white colour, and ornamented with jet black spotted circles and half rings or imperfect annular spotted figures. Dorsal tentacles large, clavate ; apex black, laminated, without sheaths. Oral tentacles linear ; white, tip black. Branchial plumes 6, large and drooping, tri-pinnate ; white and shaded lavender grey ; midribs of a dark brown colour. Foot waxy white ; spotted irregularly on the margin of edges with small and large linear spots.

This elegant funereal looking *Doris* is, with the mantle, about  $2\frac{3}{4}$  inches long, and  $1\frac{1}{2}$  broad. Rarely seen. Lives for a long

time in the aquarium. Deposits its ova in broad convoluted bands, which, when uncoiled, measure nearly 18 inches in length. A pair kept in the aquarium were seen to spawn in July. While one was depositing the band of ova on the side of the glass globe, the other kept watch, as it were, by moving in a circle round the former. The whole process lasted about half an hour.

The spots and markings of some specimens were of a dark brown colour. In others the spots were of an auburn colour.

#### DORIS GLENIEI. *Kel.*

Semi-gelatinous. Body nearly  $1\frac{1}{2}$  inch long. Mantle broad, shorter than foot,—above, white, with a pinkish yellow shade; a large irregularly waved deep golden coloured patch on the back, bordered and spotted with purplish red. The under surface of fore part of mantle, of a beautiful light purple colour. There is also a purple line on each side of the white body. Dorsal tentacles white, with golden coloured laminæ; long, conical and pointed. Oral tentacles short, white. Branchial plumes 7 to 9, short, lanceolate, pinnated; white, bordered with golden yellow. Foot pinkish white; edge pure white.

This beautiful species I have named after my friend the Rev. Owen Glenie, Colonial Chaplain of Trincomalie, who was often the cheerful companion of my zoological pursuits, and who will, I hope, on my departure from the Island, continue those researches which he has so well begun.

This is perhaps next to *Trevelyana Zeylanica* (*n. s.*) and *Doris Gloriosa*, the most remarkably coloured species in Ceylon. Found in the Inner Harbour in deep water, as also at Kottiar, opposite Fort Frederick.

#### DORIS LEOPARDA. *Kel.*

Body  $\frac{3}{4}$  inch long, grey spotted. Mantle carneous, granular; grey, and spotted with dark grey and blackish circular spots; the latter in the central parts; each spot composed of smaller spots, separated from each other by white reticulations, seen



more distinctly with the aid of a magnifier. Dorsal tentacles green ; large, broad, ovate, lamellated for nearly the whole length. Oral tentacles short, linear, acutely pointed. Branchial plumes 6, grey, speckled with darker grey, all united for nearly half the length ; the other half fringed with short plumes of a light green colour. Foot whitish, speckled ; covered by mantle

This Leopard-spotted *Doris* is of a regular oval form. Found in Dutch Bay among coral rocks.—Ova white.

*DORIS AMABILIS. Kel.*

Body 4 lines long, oblong, narrow, convex, white, spotted purple on sides. Mantle smooth, white, and spotted with purplish crimson spots ; beneath white, not spotted. Dorsal tentacles of moderate length ; apex conical, pointed ; closely lamellated ; of a golden yellow colour. Branchial plumes 5 or 6, small, bi-pinnate ; white, with purple spots at their base. All retracted within a cavity, without a rim. Head rounded, spotted purple, on each side of mouth a short linear tentacle, white. Foot narrow, longer than the mantle, slightly expanded in front, spotted purple on the upper surface.

This lovely little *Doris* is rarely found. Two specimens, obtained in May, are still alive in a finger glass, generally resting on the side of a stone. At night they crawl out of their hiding place and creep along the sides of the glass, and are sometimes seen floating on the surface of the water on their back. When touched with a feather they adhere by their foot, and can be kept dangling in this position by the aid of the mucous thread secreted by the surface of the foot. Several *Eolidæ* were kept in the same vessel, and they have survived them all, though attacked repeatedly by the *Eolis*. Ova white, deposited on side of glass in a thread-like coil.

*DORIS FIDELIS. Kel.*

Body  $\frac{3}{4}$  inch long ; narrow, convex ; white. Mantle oblong, with parallel sides ; shorter than the foot ; of a waxy white colour, the edge lined with red and irregular tooth-like transverse

internal prolongations of the same colour ; those on sides, longer, alternated with short ones. Branchial plumes 7 or 8, black ; lanceolate, pinnated, few branched at tip. Dorsal tentacles oblong, flattened, pointed ; apex black, lamellated. Oral tentacles small, acutely pointed. Foot white, narrow, slightly dilated in front, and pointed posteriorly.

Found on coral rocks at low water mark, in August and September. This singularly marked species looks, when the tentacles and branchiæ are retracted, like a large bean. Its jet black plumes and tentacles appear very conspicuous above the red margined white mantle. It is very tenacious of life. Ova deposited in narrow white coils.

DORIS PRECIOSA. *Kel.*

Body white,  $\frac{3}{4}$  inch long. Mantle pale greenish yellow, very light coloured on sides, where there is also a blueish shade ; closely speckled with small reddish-brown spots ; margin marked with a narrow purple red line and a light orange shade. Dorsal tentacles short, with reddish-purple apex, clavate, laminated. Oral tentacles triangular, sharp pointed. Branchiæ short, pinnated ; reddish-purple. Foot white, shorter than mantle.

This gem-like elegant species, is of the same size as *D. Fidelis*, and not unlike it in appearance. The deep blood-red branchial plumes, and the red margined speckled cloak, sufficiently separate it from the last species. They are both found in the same locality, and at the same time. The characters of the young species are also very marked, as in the adult specimens.

DORIS NIVEA. *Kel.*

Body  $\frac{3}{4}$  inch long, convex, elliptical, snowy white. Mantle coriaceous, granular ; white, occasionally seen speckled indistinctly with small grey spots. The purplish coloured viscera seen through the opaline back. Dorsal tentacles pure white, short, conical, pointed slightly, lamellated at tip. Oral tentacles linear. Branchial plumes 6 or 7, white, bi-pinnate. Foot white, shorter than mantle.

This snowy white opaline *Doris*, is probably only a variety of *Doris pallida* of Leuckart, found by Ruppel in the Red Sea. It has not, however, all its characters; the cloak resembles that of *D. repanda* in some respects. It has white, nerve-like lines on the margin. I have only seen one specimen, which lived for a few days.

DORIS MARMORATA. *Kel.*

Body  $2\frac{1}{2}$  inches long, oblong, convex, coriaceous; white, speckled reddish-brown. Mantle broad and long, covering the foot; thick, hard, granular; marbled with black and reddish-brown, and irregularly spotted white. Under surface white, and mottled with irregular shaped purplish-red spots. Branchial plumes 6, united at base, superior half plumose, tri-pinnated, grey and grizzled with brown. Dorsal tentacles large, clavate, laminated; brown and speckled white. Sheaths granular. Head small; oral tentacles long, linear, acutely pointed. Foot white, deeply notched and grooved in front; spotted reddish-brown.

This large marbled *Doris* lived only for a few days. They are found on rocks near Fort Frederick at low-water mark. Some are of a darker brown colour than others.

DORIS CERISA. *Kel.*

Body  $\frac{1}{2}$  inch long, convex, oval; of a vermillion-red colour. Mantle of a cherry-red colour, covering the foot. Branchial plumes 6 or 7; very small, straight and stiff; bi-pinnated; of a crimson-red colour. Dorsal tentacles small, conical, lamellated, purplish red; speckled white, tip grey. Oral tentacles indistinctly seen. Foot pinkish.

I have only seen one specimen of this exceedingly pretty species. It lived for several months in a finger-glass. It cannot be mistaken for the young of any other Ceylon species herein described. Ova red, in six narrow tape-like coils. The ova of *D. rubra* (*mihi*) are white.

DORIS RUFOPUNOTATA. *Kel.*

Body  $\frac{3}{4}$  inch long, oval, compressed ; of a white colour. Mantle coriaceous ; of a light brick-red colour, and speckled with circular spots of a darker reddish-brown colour. Branchial plumes 5 small, bi-pinnate ; greyish, speckled rufous. Dorsal tentacles short, clavate, pointed, laminated, without sheaths ; of a rufous brown colour. Oral tentacles white ; linear. Foot whitish ; short, grooved and notched in front, speckled rusty. Under part of cloak whitish, and also speckled rusty.

This stiff-looking *Doris* is occasionally seen in a circular form. Rarely found, among Pearl Oysters ; very tenacious of life.

DORIS GRISEA. *Kel.*

Body  $1\frac{1}{2}$  inch long, gelatinous. Mantle of a dark ashy-brown colour, closely speckled with reddish brown and white spots, and two or four longitudinal rows of larger blackish irregular spots. Tentacles clavate, laminated ; ashy-brown speckled white. Branchial plumes 5 whitish, speckled grey ; tri-pinnate. Mouth surrounded with a white veil (?) Foot whitish, spotted reddish-brown ; notched in the fore part ; covered entirely by the mantle. Some specimens are more reddish-coloured than others. The young are nearly always more ashy-coloured.

A very common species, found from March to September in low water, on rocks surrounding Fort Frederick, and also in the Inner Harbour. Lives a long time in the aquarium. Ova white, in three or four white coils. This *Doris* can elongate itself into the shape of a leech.

DORIS PAPILLOSA. *Kel.*

Body  $\frac{3}{4}$  inch long, white, brown spotted. Mantle coriaceous, covered with large papillæ, each rising from a circular tubercular base, or ring. Buff, and spotted dark reddish-brown ; a row of larger spots round the margin. A dark brown line runs from base of tentacles to branchiæ. Dorsal tentacles

large, apex clavate, laminated, of a light green colour, speckled white. Oral tentacles short, linear. Foot whitish and spotted with rusty-brown ; shorter than mantle. Branchial plumes 6 ; short, tri-pinnated. Posterior three plumes rusty-coloured ; anterior ones whitish.

This species resembles *Doris rufopunctata*, but its green dorsal tentacles, and papillose tubercles on mantle, sufficiently distinguish it from other species. Ova white, laid in four narrow waved coils.

DORIS RUBRA. *Kel.*

Syn. DORIS SOLEA. ? *Cuv.*

Body  $1\frac{1}{2}$  inch long, oblong, pellucid-red. Mantle crimson-red, and maculated with irregularly shaped dark brick-red or purple spots ; those on the back larger. Tentacles large, clavate ; apex red, laminated. Branchiæ 6, of a light rose colour ; large, tri-pinnate. The two anterior ones smaller than the rest. Foot oblong, broad, of a pinkish-red colour ; longer than mantle ; rounded in front and transversely grooved ; anterior lamina notched in centre. Oral tentacles linear ; mantle extended, nearly three inches.

This beautiful red species is found in great abundance in and out of the harbour of Trincomalie ; and is generally seen on mossy rocks a few feet below the surface of the water. When confined in a glass vivarium, it becomes, at night, nearly throughout, of a pellucid pinkish-white colour, which hue it retains till dawn, when gradually it assumes the brilliant red diurnal costume. Spawns in the months of May and June ; ova deposited in three or four large, white, ribbon-like convolutions.

DORIS OSSEOSA. *Kel.*

Body 1 inch long. Mantle hard, cartilaginous, granular and pitted ; granules of a whitish colour ; on the median line is a narrow ridge extending from base of tentacles to branchial plumes, which are four or five in number, emerging horizontally

from under the posterior termination of dorsal ridge. In some specimens there is a large pitted protuberance on centre of ridge. Dorsal tentacles with large granular sheaths; apex conical, lamellated; of a pale green colour. Oral tentacles white. Foot small, narrow. Branchial plumes small, bi-pinnated.

This curiously formed *Doris* resembles a piece of bone, or piece of worm-eaten white stone. Its habits are those of the other *Doridae*.

#### DORIS CONSTANTIA. *Kel.*

Coriaceous. Body  $\frac{3}{4}$  inch long; light yellow. Mantle yellowish-brown, granular; dark brown spots on edge. Dorsal tentacles yellow, conical, swollen at the apex, laminated; tip produced, white. Oral tentacles small, linear. Branchial plumes whitish, five or six, small, bi-pinnate. Foot small, covered by the mantle. Under parts yellowish.

I have only seen one of this species, which lived for many months in a vivarium. It came nightly to one of the oysters, and apparently fed on the back of the shells, upon the atoms of life found there.

#### DORIS LUTEOLA. *Kel.*

Semi-gelatinous. Body  $\frac{3}{4}$  inch long. Mantle granular, yellowish, and shaded with darker yellow. Dorsal tentacles long, black, lamellated apex. Oral tentacles short, white. Branchial plumes long, bi-pinnate, greenish. Foot white, shorter than mantle.

This elegant species is found in shallow water; spawns in October. Ova light green, in two narrow tape-like convolutions.

#### DORIS VIPERINA. *Kel.*

Body 2 inches long; white. Mantle coriaceous, oval; covered with short spinous tubercles, of a grey colour; and beautifully spotted with dark grey and purplish brown spots having a blueish shade. Under surface of mantle white, with

purplish spots, a purplish line runs near the edge; border transversely streaked. Dorsal tentacles, greenish, long, white, slightly truncated, laminated clavate tops. Oral tentacles white; long, pointed. Branchial plumes 6; short, broad, bi-pinnate; of a greenish white colour. Foot oblong, entirely covered by the broad oval mantle; white, spotted with smaller purplish spots than those seen on the under surface of mantle.

Found in deep water, near French Battery.

DORIS ATRATA. *Kel.*

Body  $\frac{1}{2}$  inch long, and  $\frac{1}{3}$  inch broad; ovate, convex; of a smoky-black colour. Mantle broad, when expanded covering the foot; smooth, edge semi-transparent, the rest jet-black. Branchiæ 8; small, of a smoky-black colour, bi-pinnate; two sets of 4 each, all entering the same cavity round anus. Foot long, narrow, rounded in front, slightly projecting behind when in progression; of a pale smoky colour. Mouth indistinctly seen. Oral tentacles linear. Dorsal tentacles pellucid, with clavate apex; black; tips white, looking like eyes set on the tentacles. Ova white, in three or four small narrow tape-like coils.

This species may prove to be either identical with *Doris fumata* of Leuckart, or *D. fumosa* of "Quoy et Gaym," the latter more probably, as the remarkable, white tipped tentacles (always present), could not have passed unobserved by Ruppel. The branchiæ however, of *D. fumata* would appear to correspond with those of the Ceylon species. The next species too, which I regarded at one time as only a variety of *D. fumata*, must, I think, be considered distinct, as it was not found in April with *D. atrata*, but subsequently, when the latter became scarce.

DORIS ATROVIRIDIS. *Kel.*

Body 10 lines long, of an invisible-green colour. Mantle broad, undulating, of a greenish-black colour; edge streaked with a pale crimson line. Tentacles and branchiæ as in *D. atrata*. Foot of a pale invisible-green. Ova like those of

the preceding species. Some of the specimens had the mantle indistinctly, but regularly, spotted white ; these spots, composed of several smaller spots round a centre, looked, through a magnifier, like little stars.

The young of this species is of a jet-black colour, with a broad brilliant crimson line round edge of mantle and foot. If I had not specimens of different ages to compare with, and observe the gradual diminution of the intensity of the red line, till it became almost obsolete in the larger specimens, I should be inclined to consider the characters of the young to be those of a distinct species ; so very great are the external characters of the young and older animals. The presence of the red line in the young of this species, and its non-existence in the young of *D. atrata*, still more confirms me in the opinion already advanced, that they are not identical species. Both are very sluggish in their habits ; generally, two or more lie locked in each other's embraces, under a stone or a coral branch. In confinement they live longer than any species I have had under observation.

#### DORIS VARIABILIS. *Kel.*

Body 6 lines long, pellucid green ; the red viscera seen through it. Mantle greenish-brown, and marked with longitudinal rows of reticulated whitish spots. Dorsal tentacles clavate, laminated ; greenish-brown, speckled ; tip white. Branchial plumes 8, small, round a central cavity, tri-pinnate ; brown, speckled white. Foot pellucid-green ; shorter than mantle.

This species is found in great abundance on rocks in Dutch Bay at low-water mark. They vary much in depth of colour ; green, however, always prevailing. In habits, like *D. atrata*.

#### DORIS EXANTHEMATA. *Kel.*

Body 5 inches long ; pinkish or light purple colour. Mantle long, broad ; covered with large and small, smooth conical and rounded nodules, rising from smooth elevated bases. The upper surface is of a deep olive-brown colour, having several white splashes ; edge of a lemon colour. Under surface of mantle



pinkish, and near the body there is a broad undulating reddish band, terminating abruptly on each side below the foot, not unlike in appearance to some cutaneous disease. Dorsal tentacles long; pinkish and smooth for two-thirds of its length, apex clavate, laminated, truncated; of a pale brown colour. Oral tentacles long, conical; pinkish. Branchial plumes 6; large, pendant tri-pinnated; plumes pinkish-red and speckled-white; midribs greenish. Foot much shorter than mantle, deeply grooved and notched in front, obtusely pointed posteriorly; of a light pink colour, except the edge which is of a lemon colour with transverse striæ.

The whole animal gives one more the idea of a horrid disease than the charms of a sea nymph. This species is semi-gelatinous and very glutinous on the surface, particularly the mantle. When dead it rapidly dissolves, and cannot be preserved in spirits. The largest specimen I have seen measured 8 inches long and 5 inches broad. It will not live more than a few days in the aquarium. Ova of a beautiful red colour; coil  $\frac{3}{4}$  inch broad, and 18 inches in length. This species resembles *Doris carbunculosa*, but the smooth nodules, and the red ova, of the former will always be sufficient marks of distinction.

#### DORIS CARBUNCULOSA. *Kel.*

Body nearly  $4\frac{1}{2}$  inches long; oblong, oval; of a pinkish-purple colour. Mantle semi-gelatinous, broad and long, and of an oval form; purplish-brown colour, studded with numerous large warty nodules, and larger ones rising from a raised tubercular ringed base. Nodules of a deeper brown colour; some have also a greenish tinge and others are variegated with white. Dorsal tentacles long, produced, clavated, truncated superiorly, laminated; of a pale purplish colour. Mouth with a small triangular-shaped veil. Branchial plumes 5; large, broad and long; closely tri-pinnated; of a rusty-red colour, grizzled with white. Foot short, oblong, oval; of a purplish-pink colour; sides of under surface veined and of a pink colour.

The mantle of this inelegant *Doris*, is not unlike some carbuncular formation. The under surface is pinkish and shaded with purple. It is a very unsightly object. The edge of the mantle of the young is mottled-yellow. The whole animal is nearly 5 inches long, and  $3\frac{1}{2}$  broad in the centre. Ova white, deposited in narrow tape-like form in four or five broad coils. The white ova alone sufficiently distinguish this ugly sea-nymph from her rival *D. exanthemata*.

DORIS INTECTA. *Kel.*

Body  $1\frac{1}{4}$  inch long. Mantle warty ; of a dark-brown colour, nearly black ; on the medial line is a thick white pasty line. Dorsal tentacles brown ; clavate, laminated. Oral tentacles long, linear, pointed ; of a bright-brown colour. Branchial plumes 6, tri-pinnated ; of a golden-brown colour. Foot golden-brown ; narrow, longer than mantle.

This warty *Doris* is easily distinguished from others of a brown colour by its rufous warty mantle, and the dirty-white line on back. Even the young have the white dorsal streak. Very common in low water in the months of September and October.

DORIS LANUGINOSA. *Kel.*

Body  $\frac{1}{3}$  inch long ; of a pale-green colour. Mantle green, covered with short downy hair. Dorsal tentacles green, lamel-lated, pubescent. Oral tentacles not observed. Branchiæ 10 or 12 ; small, of a sap-green colour, bi-pinnated. Foot shorter than mantle ; of a pale-green colour, transparent.

Of this downy species I have only seen one specimen. It lived only a few days. Found near Nicholson's Cove.

DORIS SPONGIOSA. *Kel.*

Semi-gelatinous. Body nearly  $3\frac{1}{2}$  inches long. Mantle broad, oval, covering the foot in all parts ; of a dull yellow-brown colour, deeply pitted ; margin of pits granular ; cavities spongy. The whole upper surface of mantle looks like the

surface of some species of sponge. Beneath of a darker yellow-brown colour. Dorsal tentacles large, with slightly truncated, laminated apex, sheaths large, funnel-shaped; granular. Oral tentacles (?). Branchial plumes 5, grey, drooping much; bi-pinnated. Foot broad, long.

This very curiously formed *Doris* is found in deep water in the Inner Harbour. The young may be mistaken for a distinct species, from the lateral cavities or pits being deeper. The whole animal is nearly the size of *D. exanthemata*.

#### DORIS STRIATA. *Kel.*

Coriaceous. Body  $1\frac{1}{2}$  inch long. Mantle nearly smooth; white, with light-brown wavy streaks. Under surface white, with linear wavy streaks near the body. Dorsal tentacles with short conical, laminated apex. Oral tentacles white, linear, pointed. Branchial plumes 5 or 6, small, bi-pinnated; white, streaked with brown. Foot pure white, narrow, oblong. Found in Dutch Bay.

#### DORIS CORRUGATA. *Kel.*

Body nearly 1 inch long, oval, whitish. Mantle coriaceous, corrugated, and studded with small tubercles; those on the sides larger, and each has a spine; of a pale watery-green colour; black spotted under surface, also greenish and spotted with small dots. Dorsal tentacles short, open, greenish, lamellated. Branchial plumes grey; 7 or 8, short, pinnated. Foot pale-green; narrow; shorter than mantle. Oral tentacles short, triangular, pointed.

I have seen only one live specimen of this curious *Doris*.

#### DORIS PICTA. *Kel.*

Coriaceous. Body  $2\frac{1}{2}$  inches long. Mantle large, oval, covering entirely the foot; upper surface granular, of a yellowish-brown colour, splashed with large and small irregular brick-red spots; under surface white, and near the body painted with small and large bright red spots. Dorsal tentacles clavate,

laminated, slightly truncated ; sheaths large, granular. Oral tentacles long, pointed ; white, spotted red. Foot broad, shorter than mantle ; white.

This remarkably painted *Doris* is found in deep water. Occasionally it burrows in the sand, where it lies for hours,—plumes and dorsal tentacles alone being uncovered.

DORIS BELLICOSA. *Kel.*

Coriaceous. Body  $2\frac{1}{4}$  inches long. Mantle large, oval, upper surface granular, and covered with small spines ; of a dull brick-red, or chocolate colour, and irregularly streaked with pale-yellow. Under surface of mantle white, splashed and spotted with chocolate. Branchial plumes 6, large, bi-pinnated ; of a dull-rose colour, and speckled yellow in small specimens. Dorsal tentacles with small clavate, pointed, apex. Oral tentacles white, short, pointed. Foot broad, oval, of a dark-red colour with a pale whitish edge.

Found in deep water in the Inner Harbour of Trincomalie. The mantle of this species resembles much that of *D. picta*, but its spines and chocolate-coloured foot sufficiently distinguish it from that species, which has a white foot and beautifully painted under-side of mantle. They live for many months in a vivarium,

DORIS CASTANEA. *Kel.*

Carneous. Body  $1\frac{1}{4}$  inch long. Mantle thick, granular and tubercular ; of a reddish-chestnut colour. Dorsal tentacles red, short, laminated ; tip produced, whitish. Oral tentacles short, linear, pointed. Branchial plumes 6 (?), short, bi-pinnated ; of a purplish colour. Under parts deep vermilion-red, and speckled with darker red. Foot short, red.

Found near Sober Island, Trincomalie Harbour.

## Sub-genus. ONCHIDORIS.

ONCHIDORIS LEACHII, *Blainv.*

Carneous. Body oval, about  $1\frac{1}{4}$  inch long. Mantle granular and studded with filamentous granules. Those on the posterior third of mantle often large, and appearing like small branchial plumes. No dorsal tentacles. Two oral tentacles, which appear to protrude through notches, from under the anterior edge of mantle. The foot is broad and nearly occupies the whole of the under part of mantle. Anus opens on the under surface of the posterior part of mantle. Orifice of the organs of generation on the right side.

Found on rocks in the Inner Harbour. I have scarcely any doubt, that this is the *Onchidore* described by Blainville from a specimen seen in the British Museum, whose *habitat* was not known.

The colour of the animal is of a light-grey, mottled with black spots in some specimens. In spirits the filamentous granules are not seen, but when the animal is alive they are so distinctly, and the contractile character of the filaments are very observable, especially of the larger ones.

TREVELYANA, *n. g.*

Body without a cloak. Two dorsal tentacles without sheaths, non-retractile. Mouth in front of head, without tentacles. Branchiæ in a circular disc on the back ; non-retractile.

TREVELYANA ZEYLANICA. *Kel.*

Body  $1\frac{1}{4}$  inch long, narrow, elevated and inflated near the branchial plumes ; semi-gelatinous, white and spotted with small dark orange-red spots, set wide apart from each other. Head rather produced and rounded ; also spotted red. Mouth circular, small ; situated in front, without veil or tentacles. Branchial plumes 15 or 16, situated on posterior third of body, round a large disc, in the centre of which is the vent. Plumes long, downy, closely set ; pure white, with a longitudinal

bright red streak on the back of each ; slightly contractile, but they do not retract into a cavity ; when extended, they resemble a small tuft of marabout feathers. Genital orifice in a nipple-like process, situated between the anterior and middle-third of body. Foot long, and broad ; terminating posteriorly in a lancet-shaped point, about  $\frac{1}{4}$  inch from body ; white, with a delicate light orange-red line on the edge of the foot ; this line is carried partially on each side of head. Tentacles 2, dorsal ; short, conical, pointed ; upper half indistinctly laminated ; of a light orange-red colour at tip ; base colourless, transparent. Ova yellow, deposited in bead-like coils. They generally deposit the coils on branches of sea-weed. Sometimes this *Doris* resembles a miniature fan-tail pigeon ; particularly when perched on sea-weed, and the small marabout plumes are elongated.

Found on rocks and sea-weed near Sober Island.

This elegant creature does not resemble any of the described species. The form of the body is not unlike that of the genus *Ancula*. Its nearest approach, in other particulars, is to *Polycera*.

I venture to make a distinct genus of this *Doris*, and dedicate it to Sir Walter Trevelyan, to whom I am indebted so much for the liberal aid he has afforded me in my researches into the Natural History of Ceylon.

#### Fam. TRITONIADÆ.

##### MELIBŒA. Rang.

Animal elongated, with a narrow, channelled foot, and long slender tail ; sides of the back with pairs of tuberculated lobes, easily deciduous ; tentacles cylindrical, retractile into long trumpet-shaped sheaths ; head covered by a lobe-like veil ; sexual orifices behind right tentacle ; excretory behind first gill on the right side.—(*Woodward*.)

*MELIBŒA VIRIDIS. Kel.*

Animal gelatinous, transparent, of a greenish vitreous colour. Body covered with hairy filaments. Head small, nearly circular, covered with filaments. Veil large, and very expansive; circular opening lined with cilia. Tentacles 2, about  $\frac{3}{8}$  inch long; capsule small, covered with filaments. Branchiæ 6 or 7 on each side, unequal, wedge-shaped; placed alternately; base broad; slightly pedunculated, covered with cilia and filaments, giving a very hairy appearance; base brown; the other parts greenish and speckled with dirty white. Foot narrow, of pinkish colour on edge, and upper surface covered with short filaments.

Nearly 3 inches long.

Found on weeds near Inner Harbour; not common; can swim very actively. The veil over the head is used as a net doubtless to entangle its prey. The opening is very dilatable. Deposits its ova in a flat mass; ova white.

*SCYLLŒA (?) DRACŒNA. Kel.*

Animal green; elongated, narrow. No mantle. Two tentacles placed anteriorly on side of head; non retractile; tentacles folded or cylindrical, slightly granular. On the centre of the back there are three unequal wing-like denticulated lobes, of a green colour, with a tooth-like processes, tipped red; sides of the posterior half of body also toothed with two lines of small, pointed, red-tipped tubercles. Foot narrow, channelled. Mouth protected by two small semi-orbicular flaps or veils. Orifice on right side. Length nearly 1 inch.

I have some doubts as to the propriety of placing this species under the genus *Syellæa*. I could not discover any tufted branchiæ on the surface of the dorsal lobes. I propose naming this genus, closely allied to *Glaucus*, if new, in honor of Dr. Templeton, late of the Royal Artillery (brother of the Belfast Naturalist) who has contributed considerably to the Fauna of Ceylon.

I have found only one specimen on a branch of sea-weed. It looked at first like a piece of green weed, but on placing it in fresh sea water, the lobes expanded and waved about very briskly. The red tips of the lobes contrasted beautifully with the bright green of the animal. It lived only a few hours.

POLYCERA (?) ZEYLANICA. *Kel.*

Body  $\frac{1}{2}$  inch long. No distinct mantle. Head covered by a membranous fimbriated veil ; the long filaments slightly toothed. Veil continuous with a narrow membranous expansion on side of body, which are united at the tail. Large fimbriated filaments also on sides of body. A membranous crest runs on the medial line of back. Dorsal tentacles retractile in a sheath ; clavate, laminated, incurved at the tip ; brown, white tipped. Oral tentacles white ; broad and short. Branchial plumes 5, short, bi-pinnated, retractile, placed in a circle, in the centre of the back, near the third pair of dorsal filaments. Colour above, bright orange-red ; beneath whitish, with red specks seen through the transparent foot. Ova, bright red ; in narrow coils. The whole animal is scarcely 1 inch long ; and its broadest part not more than  $\frac{3}{8}$  of an inch.

I have placed this species, very doubtfully, under the head of *Polycera*. I believe there is sufficient reason to make a new genus of the leading characters of this pretty little creature. The transparent membranous expansion is fully extended when the animal swims, which it does, more freely than any known species. For 10 or 15 minutes it will keep floating and moving its body like an eel in the water. Very rare ; a few specimens lived for many months in my vivarium.

Fam. *ÆOLIDÆ*.

Animal with papillose gills, arranged along the sides of the back ; tentacles sheathless, non-retractile ; lingual teeth 0. 1.0 ; ramifications of the stomach and liver extending into the dorsal papillæ ; excretory orifices on the right side ; skin smooth, without spicula ; no distinct mantle.



*ÆOLIS\* HUSSEYI. Kel.*

Tentacles 4. Both pairs of the same shape and form ; but the anterior ones longer, of a limped-orange hue, tipped with white. Back of a dull orange-brown colour ; a triangular white space behind dorsal tentacle. Branchiæ numerous, in 3 rows on each side of body, white and ringed with light purple, tip white. Foot dilated anteriorly ; no lateral processes.

Rare; named in memory of a departed and beloved companion of my earliest scientific labours.

*ÆOLIS BICOLOR. Kel.*

Body  $\frac{3}{4}$  inch long, slender : waxy-white ; a dusky spot on neck anterior to dorsal tentacles. Dorsal tentacles short, smooth, transparent white at base ; corrugated or laminated at apex, of a deep orange-red colour, becoming darker at tip. Oral tentacles twice as long ; pellucid-white throughout ; tapering, curved. Head small, rounded. Branchiæ medium sized ; narrow, acutely pointed ; white with a subterminal orange-red ring ; apex waxy-white. They are set in 6 or 7 small clusters, the anterior ones composed of 34 or more branchiæ ; the others of two, rarely of three ; becoming smaller as they approach the tail. Foot linear ; white, transparent ; slightly expanded in front.

Found among sea weed in Back Bay, Trincomalie.

*ÆOLIS EFFULGENS. Kel.*

Tentacles 4 ; 2 dorsal moderately long, laminated obliquely ; dark-orange, tipped white. The two anterior ones orange, with a whitish spot in centre and tipped white, a dark shade behind dorsal tentacle. Branchiæ in 5 or 6 clusters on each side of back. The anterior clusters consisting of 12 or 15 narrow

---

\* *Nym. Æolia*, daughter of Æolus.

obtusely pointed branchiæ ; orange-red at base, ringed with white and orange, tip white ; a bluish line running longitudinally for nearly two-thirds of its length.

Found in great number in Dutch Bay, and other parts of the sea near Fort Frederick. Spawns in June and July. Ova white, in narrow thready coils.

*ÆOLIS PAULINÆ. Kel.*

Tentacles 4 ; two dorsal, red, wrinkled. The two terminal tentacles pinkish, tip red, base white. Branchiæ reddish, numerous, short ; anterior ones have a whitish central ring, tipped red ; posterior ones of a redder colour, tips more broadly tipped with red ; the central white ring less distinct. Foot expanded, with a short, triangular-pointed process. Length  $3\frac{1}{2}$  lines.

*ÆOLIS TRISTIS. Kel*

Tentacles 4 ; two dorsal, about half the size of the two anterior ones ; white with blackish rings. Body white, an interrupted blackish line on each side of back. Branchiæ in clusters of 3 or 4 ; short, pointed, white, and ringed with black. Foot slightly expanded, and notched anteriorly. Length about 3 lines.

Found on sea-weed in one of my Aquaria. Ova white.

*ÆOLIS NODULOSA. Kel.*

Tentacles 4 ; opaque-white. Dorsal long, pyramidal, pointed, with three nodular rings ; oral tentacles short, narrow, pointed, white with a yellowish shade. Head and back white. Branchiæ in five small clusters on each side ; long, nodular, obtusely pointed ; opaque-white and spotted indistinctly with slight orange-brown ; base darker. Foot slightly contracted anteriorly.

Length about  $\frac{1}{2}$  inch.

*ÆOLIS SMEDLEYI. Kel.*

Dorsal tentacles pyramidal, ringed ; of a dusky grey colour. Oral tentacles long, pointed, white, with a central red ring. Branchiæ in five small clusters on each side ; the anterior pair largest. Papillæ short, conical ; white, and ringed with grey. Foot long, with anterior tentacular processes Length 4 or 5 lines.

I have named this species in remembrance of one who was a frequent visitor of my "Aquarian establishment," and who took a warm and friendly interest in all my scientific pursuits. This small *Æolis* was discovered on some sea-weed growing in a Vivarium.

Genus. PROCTONOTUS. *A. and H.*

Animal oblong, depressed, pointed behind ; dorsal tentacles 2, linear, simple, with eyes at base, behind ; oral tentacles short ; head covered by a small semi-lunar veil ; mouth with horny jaws ; gills papillose, on ridges down the sides of the back and round the head in front ; vent dorsal.—*Woodward.*

PROCTONOTUS ORIENTALIS. *Kel.*

Animal semi-gelatinous, greenish. . Dorsal tentacles 2, bifurcated and retractile. Oral tentacles short, pointed. Branchiæ, four or five rows on each side of body, those nearest the body smaller ; wedge-shaped, rounded superiorly, flattened ; green, spotted grey and green. Branchiæ carried round the head in two or three rows ; middle ones longer, all of the same shape. Foot broad, long, grooved in foot. Length  $2\frac{1}{2}$  inches. Ova white, in waved thread-like coils.

This exceedingly interesting animal may perhaps occupy a new generic place, as I do not observe the *bifurcated dorsal branchiæ* noticed in the other species of the genus *Proctonotus*. When coiled up it looks like a flower, with green petals.

Found in Trincomalie, in May and July.

PTEROCHILUS VIRIDIS. *Kel.*

Animal light-green. Length  $\frac{1}{2}$  inch. Tentacles 2, simple, long, pointed. Head with small lateral lobes. Branchiæ very numerous, closely set; long, linear, acutely pointed. Branchiæ green, and spotted with darker green and grey. Foot linear. Found on sea-weeds, and, owing to its colour, not easily recognised. Lives for a long time in confinement. Ova green.

Fam. ELYSIADÆ.

Genus. ELYSIA. *Risso.*

Animal elliptical, depressed, with wing-like lateral expansions; tentacles simple, with sessile eyes behind them; foot narrow.

ELYSIA GRANDIFOLIA. *Kel.*

Head and body light-green, white, and occasionally black spotted. Head and neck naked. Tentacles 2, folded longitudinally, on side of head; bronzed-green, tip brown. Buccal tentacles 2, small. Membranous wing-like expansion on each side of body; broad anteriorly; acutely pointed posteriorly, and united at the tail. Membrane green, edged with a black and a golden yellow line. No distinct foot. Orifice on the back (?). Mouth beneath.

The whole animal gives one the idea of a large leaf; and, when moving, that of a butterfly. Found on sea-weed. Some are more than 3 inches long; greatest transverse diameter, with wings expanded,  $2\frac{1}{2}$  inches. Distinct veins, filled with fluid seen on the wings; the heart pulsating on the centre of the back. I have some doubts as to the propriety of placing this interesting creature under the head of *Elysia*. If on further investigation, it is found that it does not belong to any known genera, I propose naming it HYDROPSYCHE.

ELYSIA PUNCTATA. *Kel.*

Smaller than the last species; largest specimen seen measuring  $1\frac{1}{2}$  inch.

Animal of a lighter green colour. Tentacles dark-brown, spotted white. Back whitish-green, dotted with black and green, and spotted like the back. Edge of mantle black, and shaded with golden ; under surface of wings tubercular and dotted black.

Found on sea-weed. Not easily distinguished from the young of *E. grandifolia*.

#### ELYSIA CÆRULEA. *Kel.*

This is a very small, beautiful species, about  $\frac{3}{4}$  inch long ; when the wings are folded, it is not thicker than a crow's quill. Tentacles 2 ; blue, with a central red ring, tip blackish. Body and wings blue ; under part of head, and fore part of foot, red ; edge of wing lined with black and red lines, the latter outermost.

Found on sea-weed, in the Inner Harbour. All three species have the same generic characters, and doubtless belong to the same genus.

#### Order. INFERO-BRANCHIATA.

#### Genus. PHYLLIDIA. *Cuv.*

Animal oblong, covered with a coriaceous tuberculated mantle ; dorsal tentacles clavate, retractile into cavities near the front of the mantle ; mouth with two tentacles ; foot broadly oval. Gills forming a series of lamina extending the entire length of both sides ; excretory orifice in the middle line, near the posterior end of the back, or between the mantle and foot ; reproductive organs on the right side ; stomach simple, membranous.

#### PHYLLIDIA ZEYLANICUS. *Kel.*

Mantle tubercular ; salmon coloured ; three continuous black lines run round the whole length. The internal one broader,

taking within its circuit the dorsal tentacles and anal orifice ; two other lines run parallel to this all round the mantle ; the outer one narrowest. Dorsal tentacles large, conical, pointed ; circularly laminated at the upper half, which is of a black colour. The two oral tentacles small, black. Foot whitish, notched in front ; the blackish viscera seen through. Branchiæ whitish on sides of the body except in front. Anal opening on a black coloured tube, behind which there are four or five large tubercles of the same form as those on the other parts of mantle. Length 1 inch ;  $\frac{1}{8}$  inch broad.

Very rare.

Genus. *DIPHYLLIDIA*. *Cuv.*

Syn. *LINGUELLA*. *Blain.*

Animal oblong ; mantle ample ; gills limited to the hinder two-thirds of the body ; head with minute tentacles and a lobe-like veil ; vent at the right side, behind the reproductive orifices ? lingual teeth 30. 1. 30.

*DIPHYLLIDIA FORMOSA*. *Kel.*

Body pink. Mantle leaf-like ; dark-purple, with purplish black shades ; edge yellow, streaked longitudinally with golden yellow, broad lines alternated with very delicate narrow ones. Veil purple-black, except the anterior edge ; beneath, of a lively pink colour. Foot pink, grooved in the median line of posterior half. Branchiæ buff ; a whitish spot on anterior third of plumes. Dorsal tentacles emerging through notches on anterior edge of mantle ; tentacles red with blackish tips and sides. No oral tentacle. Length  $2\frac{1}{2}$  inches,  $1\frac{1}{4}$  inch broad.

This very beautiful species is found in deep water. It occasionally buries itself in sand, with only the head and tentacles exposed, and lies for hours in this position.

## Order. TECTI-BRANCHIATA.

Animal usually provided with a shell both in the larva and adult state ; branchiæ covered by the shell or mantle ; sexes united.

## Fam. PLEURO-BRANCHIDÆ.

Genus. PLEUROBRANCHUS. *Cuv.*

Animal oblong, fleshy, convex above with a very large and overspreading mantle. Foot large, equally outspreading, and thus leaving a wide canal all round the body. Head distinct, furnished with a veil, uniting on each side with the borders of the foot, and with two tubular tentacles, which are split anteriorly ; mouth at the extremity of a proboscis ; branchiæ composed of a double row of lamella, forming a plume on the posterior right side, between the mantle and the foot. Anus carried by a small tube behind the branchiæ. Organs of generation in front. Shell sometimes rudimentary, membranous, with a tolerably distinct apex hidden in the thickness of the mantle.—*Woodward.*

PLEUROBRANCHUS CITRINUS? *Ruppel.*

Orange-red ; mantle darker than the other parts of the animal, and speckled with whitish spots. About 1 inch in length. Ova reddish, in circular broad coils.

Very common in Trincomalie. Found in low-water, on coral stones and sea-weed, nearly throughout the year. Spawns in May, June and July.

PLEUROBRANCHUS RETICULATUS? *Gmel.*

Pale orange-red, reticulated mantle, and spotted purple.

About 2 inches long. Found near Fort Frederick, Trincomalie, in shallow water among rocks.

PLEUROBRANCHUS ZEYLANICUS. *Kel.*

Pale yellow, splashed with darker yellow and brown, and minutely spotted with rusty-brown.

About 2 inches long.

Rare ; found in Rock bay.

PLEUROBRANCHUS PURPUREUS. *Kel.*

Deep reddish-purple Mantle very dark-purple, and spotted with still darker purple. There is a bright white zig-zag line on each side of the back of some large specimens. Length nearly 6 inches ; 4 inches broad. The young is of a lighter purple, and may be mistaken for another species.

Found in deep water, Trincomalie.

---



## CEYLON ZOOPHYTES.

---

RADIATA.

## Order. POLYPI.

## Fam. ACTINIADÆ.

Animal single, fleshy, elongate or conical, capable of extending or contracting itself, fixed by its base, but with power of locomotion, mouth in the middle of the upper disc, very dilatable, surrounded by one or more rows of tentacula ; oviparous and viviparous ; marine.

Genus. ACTINIA. *Linnaeus.*

Body conoid or cylindrical, adhering by a broad base ; the space between the mouth and the rim of the upper disc occupied by one or more uninterrupted series of conical, undivided tubular tentacula, which are entirely retractile.

ACTINIA WARDII. *Kel.*

Body large, greenish-yellow, except the upper half, which is of purplish colour and tuberculated ; the other parts nearly smooth, indistinctly streaked. Disc buff, with darker radiating lines. Tentacles in two or three rows, about 1 inch in length, narrow, pointed obtusely ; whitish ; base purplish, tip bright crimson, transversely striped with grey or dark buff.

Height  $2\frac{1}{2}$  inches. Breadth nearly 2 inches, when expanded.

Found in deep water on the oyster banks at Cottar, opposite Fort Frederick.

This handsome species I have dedicated to Sir Henry Ward, Governor of Ceylon, under whose auspices I have been enabled

to prosecute my researches among marine animals, with more than ordinary success.

ACTINIA TRANCHELLI. *Kel.*

Body short, longitudinally striated with pale-green, alternately with lines covered with yellow and white tubercules, small ovular granules round edge of disc. Disc circular, cup-shaped ; greenish and rayed with four or five white lines. Tentacles about an inch long, set in two rows, narrow, finely pointed, pellucid, and spotted with opaque, oblong, white and purplish spots ;  $1\frac{1}{2}$  inch high and  $\frac{3}{4}$  inch broad. The inner row of tentacles generally erect, and the outer curving over side of body.

Found in Dutch Bay. Named in compliment to Miss Tranchell, of Trincomalie.

ACTINIA PUDICA. *Kel.*

Body opaque-white ; irregularly striated and spotted with light-crimson. Tentacles few, pellucid-white ; short, conical ; set in two or three rows. Disc pellucid, and streaked with milky-white.

This elegant anemone, when detached, floats on water like a globe, and may be taken for a species of the genus *Mayas*.

Found on small stones in Back Bay, Trincomalie.

ACTINIA PASSIFLORA.

Body semi-carneous, brown. Tentacles few ; short, stout, truncated, or capped (?) ; purplish-white, the longer five or six have dark-purple base and rings.

This may be a species connecting *Capnia* with *Actinia*. Height 1 to  $1\frac{1}{2}$  inch ;  $\frac{3}{8}$  inch broad.

Found near Sámi Rock.

ACTINIA REFULGENS. *Kel.*

Small, the largest seen scarcely one inch long ; body white, translucent ; tentacles short, in two rows ; brown with golden spots.

Found on stones in Back Bay, Trincomalie.

Resembling a *Zoanthura*, but the clear diaphanous body and the disunited tentacles, at once show this creature to be an *Actinia*.

*ACTINIA VERMICOSA. Kel.*

Very small. Body 3 lines in diameter and 4 lines in height ; whitish-pellucid. Tentacles from twelve to eighteen, small, worm-like ; golden-yellow or dark yellow-brown. Very viscid. When the tentacles are withdrawn this little creature looks like the larva of an insect ; oblong globuse, with a golden coloured head.

*ACTINIA FLUCTUOSA. Kel.*

Body pale, flesh-coloured ; indistinctly longitudinally striated, with white spotted lines ; several rows of pale-blue granules near edge of disc.

Disc waved, tubercular, forming sometimes in triangular or quadrangular masses, at other times circular ; centre of disc pale, the rest white with radiating lines.

Tentacles numerous, in three rows, pale-brown, occasionally greenish-pellucid. The number on inner row fewer ; extreme point white.

Height 1 inch. Breadth  $1\frac{1}{4}$  inch.

Found in Back Bay, Trincomalie.

*ACTINIA SAMARAGDANA. Kel.*

Small, disc of a beautiful bright emerald-green, with white lines or radiating rays. Tentacles numerous, set in three rows ; short, oblong, semi-conical, obtusely pointed ; white at the base ; beyond this, purplish-brown, the rest very pellucid, dashed with purplish and white spots.

Body flesh-coloured, longitudinally striated. Two or more rows of pale-green rounded tubercules, on discal margin, inferior to outer rows of tubercules ; at times these granules are of a white colour.

About 1 inch in diameter, and  $\frac{3}{4}$  inch high. Found in deep water, Inner Harbour.

ACTINIA AUSTINII. *Kel.*

Body rounded, thick, reddish ; covered with brick-red tubercles. Disc pellucid-white, or reddish. Oral opening  $1\frac{1}{4}$  inch in diameter, margin surrounded with tentacular-like bodies in two or three rows. Tentacles numerous, in four rows ; nearly  $2\frac{1}{2}$  inches long, narrow, acutely pointed ; pellucid-white, spotted on the inner side. Stands  $2\frac{1}{2}$  inches high.

This large anemone is found in great abundance on the rocks near Fort Frederick in the months of May and June. Some, entirely free of the brick-red colour, are of a pale greenish-white ; others, have the disc one half purple and the other half grey. It adheres to the finger.

I have named this species in remembrance of a valued friend, who was one of the founders of the Ceylon Military Medical Officers' Museum,—Dr. Austin, late of the 97th Regiment.

On my recent visit to Colombo, I obtained many specimens of a smaller anemone from Mutwal rocks, closely resembling this species, but with short tentacles, and without the adhering qualities of the foregoing species. I am inclined to believe this to be a distinct species. Colours very changeable.

Genus. ANTHEA.

Body cylindraceous, adhering by a broad base ; tentacula disposed in circles round the mouth, elongated, tapered, and incapable of being retracted within the body.

ANTHEA INDIANA. *Kel.*

Body transparent, almost colourless, globose at base, elongated ; a few white spots near disc. Tentacles long, delicate, finely pointed, set in two rows on the edge of a greenish transparent disc. The inner set of tentacles more than twice as long as the external row. Tentacles pellucid, indistinctly ringed, alternately with grey and white. Oral opening

surrounded with an elevated hexagonal ring, taking the form of a cup, on the centre of which is the transverse slit of the mouth.

This parasitical anemone is found on Pearl Oysters, in the Harbour of Trincomalie. It grows very rapidly in the Vivarium, and is a good guide for ascertaining the quality of the sea water in which it is placed. When the water is impure, or any animal in it dead and decaying, this *Actinia* shrivels up and assumes a dark-brown or blackish colour, and as the water is purified the creature regains its pellucid form.

*ANTHEA ARACHNIDA. Kel.*

Resembling the *A. Indica*, but much smaller, and the disc is spotted black. The tentacles worm-like; pellucid-white, and spotted dusky. Found on rocks and shells.

*ANTHEA AUREA. Kel.*

This is a very minute species; when elongated, nearly one inch high, and scarcely four lines in breadth. Body pellucid, tentacles few, short; golden-yellow.

Found on rocks and shells.

*ANTHEA MELEAGRINA. Kel.*

Body short, broad, greenish, translucent, slightly tubercular. Tentacles numerous, of moderate length, narrow, pointed; greenish-brown, with darker brown rings. Mouth slightly elevated. Disc pale-green.

Height  $\frac{1}{2}$  inch. Breadth  $1\frac{1}{4}$  to 2 inches when expanded.

Found in the Inner Harbour, in deep water, adhering to Pearl Oyster shells.

*ACTINODENDRON ARGENTEA. Kel.*

Body white. Disc granular, frosted white. Tentacles short, acute; silvery-white, transverse granulated lines on inner surface; short pinnules on sides.

Height  $\frac{1}{2}$  inch, breadth 1 inch. Very rare. Found in deep-water.

ACTINODENDRON ZEYLANICUS. *Kel.*

Body large, semi-gelatinous, yellow or buff, longitudinally streaked, alternately with lines of pearly tubercules. Disc broad, cup-shaped, greenish-brown, or purple, with numerous radiating lines of various colours ; granular. Tentacles purplish-brown ; numerous, in three or four rows ; broad, long, pointed, crossed on superior surface with white lines, which are laterally tubercular, or slightly pinnated. A row of large oval bodies on edge of disc. Height of the largest specimen seen  $3\frac{1}{2}$  inches. Breadth 3 inches. Tentacles 1 to  $1\frac{3}{4}$  inch long, all of nearly equal length.

This handsome arborescent anemone is found on rocks in the Inner Harbour, in two or three feet of water.

ACTINODENDRON HOROLOGIA. *Kel.*

Body white, with pinkish streaks. Disc depressed, circular, pale-brown, granular ; a broad pale purplish circle, about midway between oral opening and tentacles, and on this ring are twelve broad purplish streaks, placed equidistant. Tentacles in three rows ; short, flattened, pointed ; those nearest the oral opening larger. All have tubercular granules, placed in transverse rows, from six to eight in number. Tentacles yellowish, a few white granules near edge. White tubercular lines placed in longitudinal rows on surface of body. Body when elongated about  $2\frac{1}{4}$  inches high.

Found at Trincomalie, on small stones, in low-water.

ACTINODENDRON VIRIDIS. *Kel.*

Body white, with greenish streaks and rows of white granules. Disc depressed, greenish ;  $\frac{3}{4}$  inch in diameter. Tentacles short, acutely pointed ; granulated on edge ; set in two rows. Those nearer the disc shorter, a row of larger white-spotted granules on edge of disc.

In height  $2\frac{1}{2}$  inches ; narrow at middle and base. Trumpet-shaped above.

Distinguished from *Horologia* by the absence of the purple zone on disc, and from its longer tentacles. The tubercles too are less swollen, and there is a more marked space running longitudinally on tentacles.

Found with its body buried in sand in the Harbour of Trincomalie.

*DIOSCOSOMA (ACTINODISCUS) ? ZEYLANICA. Kel.*

Body thick, short; pinkish, minutely punctulated with bright-red ; near the disc the body is streaked longitudinally with closely spotted purplish lines. The body is expanded into a cup-like disc, of a bright vermillion-red colour, with radiating white lines. Disc broad, expanded, and covering the whole body, surface covered with small lines (three or four,) short, conical, truncated, tentacles, disposed in rays, running from oral opening to edge of disc, alternated with shorter ones which proceed from middle-third of disc with two other shorter ones, on each side, and the whole terminate at the margin in close compact rays. On each side of oral opening, is a semi-globular body with a central foramen, which communicates with the oviducts.

The colours of this singular form of anemone vary much ; at times, it is all of a purplish-brown with greenish reflections, on other occasions the uncovered space of disc is of an earthy-brown colour, or green, and the rays of tentacles either entirely, green, or maculated with purple and white.

Breadth or disc when expanded from 4 to 5 inches.

If this anemone is to be considered of a genus distinct from *Actinia*, I think of reinstating the generic term of *Actinodiscus*, given to a much smaller creature by M. Blainville, for it also, like the species of Leuckart's *Dioscosa*, has two discs, and the animal, when waiting for its prey, is not unlike a depressed hour glass in shape. It can withdraw the superior disc within, when the red-spotted body is seen to be of a club-shaped form.

PEACHA GOSSEL. *Kel.*

Body semi-carneous, covered by a brownish skin, corrugated, narrow and long. Tentacles from nineteen to twenty-one, long, narrow, and acutely pointed ; either of a green colour, or purple, marked on superior surface with transverse blue or white lines, some of which are narrow-shaped. Mouth on a conical eminence. Inferior opening giving passage to ova and excrementitious matter. Length 4 or 5 inches, and about  $\frac{3}{4}$  inch broad at base, when elongated. Very active in springing ; it can adhere to sand or stones.

This is, I believe, the second species known of Gosse's new genus *Peacha*. I have dedicated it to the original describer of the genus. Mr. Gosse's description led me to observe this species very closely, although I was at first induced to consider it a species of *Edwardsia*. The inferior orifice admits of the passage of a moderate sized probe. The oral orifice has not that foliated appendage described by Gosse. It is for him to determine whether this is a generic character.

## ZOANTHURA.

ZOANTHURA, sp.—green disc.

Z. MAMMALIFERA.—brown disc.

Being now on the eve of embarkation for India, I have only time to notice the above two species of Zoanthura, which I trust will be described by other naturalists who may succeed me.





## CEYLON ENTOZOA.

## Order. PARENCHYMATA.

This order includes all those *Entozoa* which have the body filled with a parenchyma, or pulpy matter, either in a cellular tissue, or simply in the cavity, in which there is no alimentary apparatus to be discovered, except a few canals, which carry nourishment to all these parts. The ovaries are also imbedded in the parenchyma ; there is no abdominal cavity, no intestine, and no vent ; and the signs of a nervous system are few and doubtful.—*Cuv.*

## Fam. TREMADOTEÆ.

Have the under part furnished with cup-like discs, or suckers, by which they adhere.

## Genus. PLANARIA.

Body flattened, depressed. Like the *Flukes* (which infest the liver of sheep), they are bi-sexual. Very voracious, and will even feed upon their own species. They multiply rapidly in the ordinary way, and also by division of the body—even spontaneous division as is alleged. Mutilated parts are also very readily reproduced, and a partial division of the body, will even produce an animal with two heads or two tails, according as the anterior or posterior end is cleft. Several species inhabit the fresh waters, but larger ones are met with on sea shores.—*Cuv.*

The species herein described are all marine, found on rocks and sea-weeds in the harbour and bays of Trincomalie. They are exceedingly interesting creatures, some rivalling the tribe of *Dorididæ* in colours. They live for a long time in the Vivarium. The mouth, situated in most of the species near the anterior third of under part of medial line, opens and dilates like that of a sea-anemone. Ova of most species white, deposited in thin flakes on rocks and sea-weed.

Further investigation will, I believe, lead me to separate the species into more than two genera ; the majority of species correspond with M. Dugé's *Derastoma* in which there is one opening, nearer the anterior edge than in *Planaria*. The presence of tentacles, or rudimentary ones, on the anterior edge, or on the back, will also perhaps form a generic distinction. I have attached the species without any appearance of tentacular appendages to a new genus (*mihi*), *Penula*. The mouth too in this genus is placed nearer the centre of under part.

*PLANARIA CEREBRALIS. Kel.*

Rudimentary tentacles anterior, formed by two folds of the margin. Upper surface of a yellowish-brown colour and minutely streaked with fine wavy brown lines ; border lined with a black line, streaked with white. Beneath, of a beautiful salmon colour. Mouth large, placed on the anterior third of lower part of body ; lips white.

This is the largest species observed, nearly  $3\frac{1}{2}$  inches long, and 3 inches broad. Ova greenish-white.

*PLANARIA VIOLACEA. Kel.*

Tentacles, as in last species. Upper surface violet-purple colour, edged with bright-yellow. Median line yellowish ; under parts rose coloured.

About  $1\frac{1}{4}$  inch long, and  $\frac{3}{4}$  inch broad. This beautiful species, in a quiescent state, resembles some variety of pansy. Ova yellow.

*PLANARIA VIRIDIS. Kel.*

Tentacles folded ; green, spotted brown ; edge dark grizzly brown. Under parts paler.

About  $1\frac{1}{4}$  inch long.

*PLANARIA ARMATA. Kel.*

Tentacles folded, but more distinctly formed. Upper surface of a dark-purple colour, covered with short, black spines. Beneath pale-purple, smooth. About  $1\frac{1}{2}$  inch long, and nearly  $1\frac{1}{2}$  inch broad.

*PLANARIA PAPILIONIS. Kel.*

Tentacles as in last species, black, white tipped. Upper surface yellow, covered with small black spines. Beneath pale-yellow. Margin whitish.

Length about 1 inch.

Very like a butterfly moving in the water.

*PLANARIA PURPUREA. Kel.*

Tentacles rudimentary. Upper surface of a beautiful purple-colour ; beneath paler purple.

About  $1\frac{1}{2}$  inch long.

*PLANARIA FUSCA. Kel.*

Upper surface dusky-brown. Beneath paler brown.

About  $1\frac{1}{2}$  inch long.

*PLANARIA ELEGANS. Kel.*

Tentacles red, situated on the anterior third of mantle, Upper surface pale-yellow, shaded with greenish brown, black dots ; margin black, lined with orange. Beneath whitish.

Length  $1\frac{1}{2}$  inch.

*PLANARIA THESEA. Kel.*

Tentacles white, with red tips, rising from depressions, or cups, placed near the middle third of body. Upper surface of a chocolate-brown colour, edge yellow. Mouth in the middle, below genital organs. Beneath pale-purple.

Length  $1\frac{1}{2}$  inch.

PLANARIA STRIATA. *Kel.*

Tentacles rudimentary. Upper surface brownish-purple, streaked with brown. Beneath pale orange-brown.

Length  $2\frac{1}{2}$  inches.

PLANARIA MELEAGRINA. *Kel.*

Tentacles of an oval form. Medial line reddish, edged with a black line, the rest striped with broad white and light purplish streaks; margin waved and edged with black. Length  $1\frac{1}{4}$  inch. There are two linear appendages on neck, above-eye spots.

PLANARIA UNDULATA. *Kel.*

Tentacles rudimentary. In medial line purplish, the rest pale-yellow, with undulating lines and spots of purplish-brown; margin purplish. Length 2 inches.

PLANARIA AUREA. *Kel.*

Tentacles two, simple; pointed, rising from the anterior third of body. Upper surface golden and speckled with white and brown.

Nearly  $2\frac{1}{2}$  inches long.

No drawing made of this species.

PLANARIA DULCIS. *Kel.*

Tentacles rudimentary. Body brown in the medial line, the rest light-green, minutely spotted with reddish brown. Margin white.

Length 1 inch.

PLANARIA ZEYLANICA. *Kel.*

Tentacles rudimentary. Upper surface of a dark purplish chocolate colour; margin white, with an internal adjoining orange and black line. Beneath paler.

Length  $2\frac{1}{2}$  inches, and  $1\frac{1}{2}$  inch broad.

Very abundant in months of May and June. Ova white.

Genus. *PENULA*, n. g. *Kel.*

Animal gelatinous, flattened like *Planaria*, but without any appearance of tentacular appendages. Mouth placed beneath, near the central third of body. Eye spots on anterior third of back.

Ruppel figures one species of this form in his work on Abyssinia.

*PENULA OCELLATA. Kel.*

Upper surface pale yellowish-brown, with dark-brown ocellated spots. Beneath, pale-buff. Length 2 inches.

*PENULA PUNCTATA. Kel.*

White. Above minutely punctulated with reddish-brown. About  $1\frac{3}{4}$  inch long.

*PENULA FULVA. Kel.*

Yellowish, striated transversely.

Length  $2\frac{1}{2}$  inches.

*PENULA ALBA. Kel.*

White throughout.

Length  $1\frac{1}{2}$  inch. Narrow. Ova of all the species whitish.

Several other species, I have no doubt, will be yet obtained from Ceylon.

---

As these pages are going through the press, I have returned from Calcutta, and I am now preparing for the Pearl Fishery at Aripo, where I hope to obtain many curious forms of *Zoophytes*.

---

ACCOUNT OF THE WORKS OF IRRIGATION  
CONSTRUCTED BY KING PARÁKRAMA  
BÁHU, CONTAINED IN THE SIXTY-  
EIGHTH AND SEVENTY-NINTH  
CHAPTERS OF THE MAHÁ-  
WAṆSO, WITH INTRODUCTORY  
REMARKS.

BY LOUIS DE ZOYSA, MUDALIYÁR.

---

THE following extracts from the Maháwapso, having reference to works of Irrigation executed in the reign of Parákrama Báhu I., (A. D. 1153—1186), may not prove altogether devoid of interest, in connection with the very able and interesting Papers on the subject of ancient irrigation in Ceylon, recently published by order of Government. The Sovereign alluded to is the celebrated Parákrama Báhu the Great, the constructor of the “Sea of Parákrama,” the invader of India and Burma ; and whose reign Mr. Turnour characterizes as “the most martial, enterprising, and glorious in Sinhalese History.”

The first extract is the 68th Chapter of the Maháwapso, and contains an account of the efforts made by Parákrama Báhu to promote the cultivation of rice, on his assuming the government of the *Pihiti-raṭa*\* under the title of *Mahádi*

---

\* The ancient divisions of Ceylon were :—*Pihiti-raṭa*, bounded on the west, north, and east, by the sea ; on the south by the Maháweli-ganga, and Deduru-oya rivers ; it was also sometimes called *Rája-raṭa* as the ancient capitals were situated in it : *Ruhunu-raṭa*, bounded on the west and north by the Maháweli-ganga, and Kalu-ganga (or Kalutara) rivers, and on the east and south by the sea. The mountainous portion of it was called *Malaya-raṭa* : *Máyá-raṭa*, bounded on the north by the Deduru-oya, on the east by the Maháweli-ganga and the mountains, on the south by the Kalu-ganga, and on the west by the sea.”—Turnour’s Ceylon Almanac, 1834, p. 57.

*pádo* or sub-king. The second extract is a part of the concluding Chapter of the reign of the same monarch, and gives a summary account of the principal public works executed during his government. It consists of 87 verses, of which the first 24 relate to the formation of extensive gardens and plantations ; the next 26 to the construction of tanks and canals ; and the last 27 to the erection of various public buildings, such as *dágabas*, image houses, preaching halls, inns or houses for strangers, libraries, theatres, &c. I have only translated the verses relating to tanks ; those which have reference to canals and water-courses having already been translated and published by Mr. Turnour in the Ceylon Almanac for 1834.

I have not thought it necessary to add any comments of my own, by way of illustrating the translation ; but I may perhaps be permitted to say a word in reference to the information which a passage in the first extract gives respecting the “Sea of Parákrama,” to which so much attention has lately been drawn by the publication of that valuable contribution to the ancient history of Ceylon,—the “Report on the Ellahara Canal, by Messrs. Adams, Churchill and Bailey.”

As stated by these gentlemen, “the situation of the ‘Sea of Parákrama’ has never hitherto been satisfactorily ascertained.”

Turnour states (*vide* Ceylon Almanac of 1834, p. 68) that “the ‘Sea of Parákrama’ with its embankments of many outlets is yet unknown, or at least unnoticed.”

Major Forbes indeed surmised that the series of lakes connected by the Ellahara Canal, might be the waters to which the vanity of a King gave his own name, but he adds, that “until this canal shall have been traced through the Konduruwawe hills, the extent and difficulty of such an undertaking must excite doubts whether it were successfully accomplished.”

The explorers of the Ellahara Canal were, however, the first who declared their belief, that the series of tanks connected by this canal were the waters which bore the name of the “Sea of Parákrama.”

It does not, however, appear that this opinion is corroborated by the Mahāvamso, since in a passage in the 68th chapter, mention is made of a particular tank, which was afterwards called the "Sea of Parākrama."

The passage alluded to is the following :—

අති-මුද්දකං සුඛං පබ්බාසිව කාරික,  
සංවඛ්ඤ්ඤාවන්තාකාම විත්ථාරඤ්ඤාපාලිකං  
අභිභූතානා මහාචාරි පංතං ඤජලනිග්ගමං.  
පරකාම ඤජලෙඤ්ඤාති මහාභාරමාති, රහසි.

Atiwa khuddakaṃ pubbē Paṇḍavāpīṭhika kārīya.  
 Saṃvaddhituchohatāyāma witthāratthira pālīkaṃ,  
 Abbhunnata mahāwāripātaṃ sajala niggamaṃ,  
 Parakkama samuddoti, wohāraññabhīropayi.

“Moreover, having made *Pāṇḍa-wṍpi* (Pāṇḍa tank), which was formerly very small indeed, (into one) containing a body of water great and exceedingly lofty, having outlets for the water, and an embankment of greatly increased height, length, breadth, and strength, he gave it the name of the ‘Sea of Parākrama.’” \*

\* [It is somewhat remarkable that the above important passage in the Mahāwagga should have escaped Mr. Turnour's researches, since he gives the following account of the outlets from the "Sea of Parākrama," which is quoted by the authors of the Report of the Ellahara Canal. "The King [Parākrama] formed the deep canal called the Makara-gagga, which flowed from the Makara outlet of the sea of Parākrama; from the same sea, the great canal Hema-watī flowing to the Mahā-megha-wana. From the outlet called Sāmanmal, the canal distinguished by the name of Nīla-wāna : flowing from the outlet called the Kilā-karu-udiyāna the Salalawattī Canal : flowing from the outlet celebrated under the name of Waitra-watī, the Waitra-watī Great Canal : from the southern outlet, the Tugga-badesa Canal : flowing from the Maggala outlet, the Maggala-ganga Canal flowing from the eastern outlet, the Charapa Canal; flowing from the same sea to the Pūrnawardhana Tank, the Saraswatī Canal : flowing westward of that (Saraswatī) canal, the Wegumattī Canal." No less than ten outlets are here enumerated, as formed by the King to convey, in different directions, the accumulated waters of the tank named after himself. Of these, four appear from their names and description to have been much larger than the rest. The identification of "the Sea of Parākrama," therefore, seems to depend upon the discovery, in Padavil-kulām, or any other of the large tanks, of ten outlets corresponding with those mentioned in the above extract.—*Ed. Ceylon Almanac*, 1857, in which work this article was by permission inserted.]



I am not prepared to say what particular tank is meant by *Pañḍa-wāpi*, in this passage, as I have not been able to meet with any information, either in the *Mahāwapaṣo* or in any other work, which would enable me to identify it with any degree of certainty. The name *Pañḍa-wāpi* occurs but twice in the previous part of the *Mahāwapaṣo*. King Mahādāṭṭhiko Mahā Nāgo is said to have bestowed the "*Pañḍa-wāpi Vihāra*," i. e. 'the Pañḍa Tank Vihāra,' on a certain Sāmaṇero, which proves the existence of a tank of that name so early as A. D. 8. (*vide* Turnour's translation of the *Mahāwapaṣo*, p. 214.) The next reference to *Pañḍa-wāpi* is in the 60th Chapter of the *Mahāwapaṣo*, in which it is mentioned as one of the tanks constructed, or prepared, by King Wijaya Báhu I.,\* who reigned at Polonnaruwa A. D. 1071—1126. I am, however, inclined to think that we may recognize the *Pañḍa-wāpi* of the *Mahāwapaṣo* in the modern *Paḍavi*, or *Paḍavil-kulam* of the Wannī district.

The reasons which have led me to form this conjecture are, first, the similarity, or rather the identity, of the names; for the Pāli word *ဝေဓိ*, *wāpi*, and the Tamil word *கேள்*, *kulam*, erroneously spelt *Colom*, both mean 'tank' so that in fact the Pāli term *Pañḍa-wāpi* is an equivalent for the Tamil, *Pañḍa*

\* As this part of the *Mahāwapaṣo* has not been translated into English, I annex a translation of the verses relating to works of irrigation in this reign.

"The tanks of Mahaheli, Sareheru, Mahā Danta, Kaṭunnaru, Pañḍa-wāpi, Kallagalla, Eraṇḍagalla, Dighawatthu, Maṇḍawāṭa, Kit-taggabodhi Pabbata, Walāhassa Mahādāragalla Kumbhīlasobbha, Pattapāsāna, and Kāpawāpi, as well as many other tanks whose embankments had been in ruins, did the King build (and repair,) ever intent on the welfare of the poor. The ruler of the land having constructed embankments (to prevent inundation) in many rivers, streams, in various parts (of the Island) rendered the country abundant in food. Having also constructed the canal Tillawatthu, which had been in ruins, he filled the tank of Maṇihīra (Minnery) with water."—*Vide* 60th Chapter of the *Mahāwapaṣo*.

or *Paṇḍi-kulam*,\* which may have been corrupted into *Paḍavi* or *Paḍavil-kulam* ; secondly, the stupendous size and magnitude of the work.

Sir Emerson Tennent, who gives an interesting account of this tank in his work entitled "Christianity in Ceylon," calls it "*the largest as well as the most perfect of these gigantic works in Ceylon*," and speaks of it in such terms as would not be inappropriate in describing such a tank as the "Sea of Parákrama" must have been.

But the most interesting account, as well as that which gives us the loftiest ideas of this gigantic work, is that contained in the Governor's Minute on the Eastern Province.

His Excellency says : "It is the most wonderful work that I have yet visited, whether we look to size, difficulties of execution, or to the time at which these difficulties were surmounted.....North of these again, about 40 miles, is *Paḍavil-kulam*, the most gigantic work of all, for the bund, which is in perfect repair, (except at the one spot where in the course of ages the waters have forced a passage between it and the natural hills which it united,) is 11 miles long, 30 feet broad at the summit, 180 feet at the base, and 70 feet high.....*Paḍavil-kulam*, the greater part of which I rode or walked over, was formed by the waters of the rivers Mora-oya and Muṇḡunu-oya, confined to the plain, by the enormous bund which I have just described. *Its construction must have occupied a million of people for 10 or 15 years.*"

The most satisfactory way of settling the question as to the identity of this tank, would probably be by obtaining a facsimile and translation of the inscription, to which Sir Emerson Tennent thus alludes in his note on the tanks already mentioned to.

There is the existence of another "Great Tank" bearing the name of *Paṇḍi-kulam* in the U'va district, but being situated in the interior, it could, I think, be scarcely regarded as the *Paṇḍa-wāpi* mentioned, if, as I infer from the context, it was constructed at a later period, when Parákrama Báhu, was *Mahādi-pādo*, or king of

"On the top of the great embankment itself, and close by the breach, there stands a tall sculptured stone, with two engraved compartments, that no doubt record its history, but the Uḍaiyār informed us that the characters were Nāgari, and the language Pāli, or some unknown tongue which no one can now read."

I have only to add, that my object in submitting the accompanying translation is by no means to advance any hypothesis of my own on this subject, but simply to put parties competent to decide on the point in possession of the data contained in the hitherto untranslated part of the Mahāwapsō, and especially to aid the investigations of those gentlemen whose meritorious labours have already invested the subject with so great an interest.

---

## CHAPTER LXVIII.

This Sovereign of lofty aspirations, who was well acquainted with foreign countries, thus thought within himself :

"In what well-governed kingdom is the administration of affairs conducted without obtaining a knowledge of its means ?

"The object of my sovereignty is the advancement of the prosperity of Religion and the State, having vanquished all enemies. This kingdom, although very small, being filled with great prosperity, I shall by the superiority of my wisdom, soon bring into such a state as that it will surpass the greatness of other kingdoms.

"Conferring appointments on my officers, whose advancement is identical with my own, according to their respective merits rewarding them with honors and wealth ; causing my own people to settle in various parts within my dominions, from the mountain *Samanta-kūṭa* (Adam's Peak) as far as the sea coast, the cultivation of grain should be carried on in as many ways as possible."

Having thus reflected, the King thus addressed his officers :

"In my kingdom are many paddy fields cultivated by means of rain water, but few indeed are those which are cultivated by means of perennial streams and great tanks.

“ By rocks, and by many thick forests, by great marshes is the land covered.

“ In such a country, let not even a small quantity of water obtained by rain, go to the sea, without benefiting man.

“ Paddy fields should be formed in every place, excluding those only that produce gems, gold, and other precious things.

“ It does not become persons in our situation to live enjoying our own ease, and unmindful of the interests of the people. And ye all, be ye not discouraged, when a necessary, but a difficult work is on hand. Regard it not indeed as a work of difficulty, but following my advice accomplish it, without opposing my instructions.”

The highly renowned Monarch then ordered the construction of the great embankment celebrated under the name of *Koṭṭha-baddha*, which had long been swept away by the action of the river, leaving behind nothing but the name, and which indeed had baffled the attempts of former Kings to keep in repair.

Whereupon the ministers, one and all, represented in various ways the extreme difficulty of the work, and the instability of it, even if it could be accomplished.

The King rejecting their counsels, remarked :—“ What is there that cannot be done in this world by men of perseverance ? Is not the tradition still current that Ráma built a bridge over the great ocean itself, by means of monkeys ?<sup>o</sup>

“ If I am destined by fortune, to reduce this Island under one regal canopy, and to promote the welfare of the State and Religion, then, indeed, will the commencement of the work see the accomplishment of it also.”

Thus did he of great courage inspire his ministers with courage.

Before the construction of the embankment, however, the profoundly wise ruler of the land made, from the mouth of the embankment, as far as the country of *Ratthakara*, a great canal of great breadth and strength, and of many *pórisas* † in depth.

The Protector of the land, having assembled a great many stone cutters, workers in metal, iron-smiths and gold-smiths in the country, and having

<sup>o</sup> In reference to the fable in the *Rámáyana*, that Ráma, the conqueror of Ráwana, in crossing over from India to Ceylon, caused a bridge to be built over the sea, by his army of Wánaras or monkeys. The reef of sunken rocks which extends across the Gulf of Mannár from Rámisseram on the coast of Coromandel to Talaimannár on the coast of Ceylon, is supposed to be the remains of this bridge.

† “ The measure of a man’s reach.....Equal to the height, to which he reaches, when elevating both arms with fingers extended.” (See Colebrook’s *Amarakosha*, p. 160.)

employed them in the work of cutting stones, got made by them an embankment of great stability and solidity, having the interstices of the stones invisible, like one continued sheet of rock, and having the work of plastering complete.

On the summit of the great embankment, the pious Rájá placed a *Bò* tree, an image house, and likewise a *dágaba*.

The King, by means of this canal, so directed the course of the stream as to make it discharge itself into the sea.

Having cleared the great jungle on both sides of the canal, he formed paddy fields of many thousands of *Wáhas*<sup>o</sup> of extent and converted the place in truth into a *Koṭṭhabaddha*, according to the literal meaning of the term, from the fact of its having *Koṭṭhabaddhas*,<sup>o</sup> 'perpetual granaries,' from the two Páli words *koṭṭha*, 'granary,' and *abaddha*, 'perpetual.'

Thereafter the King having dammed up the mouths of the rivers *Sankhawaddhamána*, and *Kumbhilawána*, as far as the *Súkara Nijjhara*† (literally 'hog-cascade,' or 'stream,'); and there too, having made a canal, and conducting the water into the tank of *Mahádúragalla*, thoroughly repairing, at the same time, the breaches thereof, including the clearing of the water-courses, (thus) brought it into a larger body of water than it had before, and having formed paddy fields from this place as far as the *Súkara Nijjhara*, collected paddy.

<sup>o</sup> According to the Páli *Nighañḍu* of *Moggállana*.

4 <i>Ṇelis</i>	make	1 <i>Lahasa</i> (or <i>Kuruṇi</i> )
4 <i>Lahas</i>	„	1 <i>Droṇa</i>
4 <i>Droṇas</i>	„	1 <i>Marika</i>
4 <i>Marikas</i>	„	1 <i>Khári</i> or <i>Amuṇam</i>
20 <i>Kháris</i>	„	1 <i>Wáha</i>

† This is no doubt the *Koṭṭa-vélla* of Brook. The Sinhalese word, වෙල, *vélla*, and the Páli word බඩ, *baddha*, both mean 'embankment.'

"From *Koṭṭa-vélla* to *Dástota*, a distance of 9 miles, the country is one of the most delightful I ever recollect seeing on this Island, nearly the whole distance a carriage might drive; there are strong marks of the plains and parts of the open country having been cultivated, it abounds in tanks and ravines to facilitate irrigation, all of which are neglected and broken. The reason the inhabitants assign for this, is want of people, and money to keep them in order. (Route from *Mátale* to *Trincomalie*, by way of the *Ambaṅ-gappa*, by R. Brook, Esq.)

‡ Instead of "සාම සුකර නිජ්ඣරං" "as far as the *Súkara Nijjhara*" some MSS. read "සාම සුකර නිජ්ඣරං," "the place *Súkara Nijjhara*." If this be the correct reading, the whole passage might be thus translated: "Thereafter the King having dammed up, at the junctions of the rivers *Sankhawaddhamána*, and *Kumbhilawána*, the place called *Súkara Nijjhara*, &c."

The King, moreover, having made a collection of water in the middle of the river *Jajjara* (*Deḍuru-oya* ?) and having formed paddy fields, collected vast quantities of grain.

Moreover, having made *Paṇḍa-wāpi*, which was formerly very small indeed, (into one) containing a body of water, great and exceedingly lofty, having outlets for the water, and an embankment of greatly increased height, length, breadth and strength, he gave it the name of the "Sea of Parákrama."

In an island situated in the middle of it, on the summit of a rock\* the King built a *Dhātu-gabbho* (*Dágaba*) resembling the peak of Mount *Kaṭlāsa*.

In the middle also of the tank, he built a Royal Palace three stories high, and of superlative beauty : a palace indeed for the collected joys of the world.

The following, and many other ruined tanks and mountain streams did this benevolent monarch repair, in various parts of his dominions, viz., the tank of *Mahágalla*,† the tank of *Seṭṭhi*, likewise that of *Chhattunnata* the tank of *Tamba*, and the tank of *Ambawala*, the tank of *Giribá*, the tank of *Paṭala*, the tank of *Maṇḍika*, the tank of *Mórawāpi*, and the tanks of *Sadiyaggama* and *Tilagulla*, also the tank of *Malawalli*, the tank of *Kālikittakaṇḍaka*, the tank of *Kanikaragalla*, and the mountain stream *Buddhagama*, the tank of *Sūkaragama*, ('the village of hogs,') the tank of *Maha-kirala*, the tank of *Giri*, and those of *Rakkhamana*, *Ambāla*, and *Katunnaru*, the tanks of *Jallibāwa* and *Uttarāla*, and that of *Tintiṇigama*, ('the tamarind village,') the tank of *Dhawalawitthi*, *Kira-wāpi*, and *Naḷannaru*, the tank of *Karawitthawilatta*, likewise that of *Dumbaragama*. The tanks of *Mūnaru*, and *Salakas*, and also the tanks of *Mūlawāri*, *Girisi-gama*, *Polonnarutala* and *Wisirattala*.

Draining up great marshes, in the country of *Panchayōjana* (*Pasyōḍun*, or *Pasḍun-kóralé*,) he formed paddy fields, and collected paddy.

Allotting lands for paddy cultivation in the jungles there, and in many other places, calling together the village chiefs, he caused the inhabitants to engage themselves in the cultivation of paddy.

\* I am informed by Mr. Braybrooke, who has visited *Paḍavil-kulam* that there is a rock in the embankment, called by the natives දෙවියන්ගේ කඳු, *Deviyanné-kandu*, "God's Hill," or "King's Hill," which they believe is haunted by the spirit of King Mahasen, to whom tradition ascribes the construction of the tank.

† I have no means of ascertaining the Singhalese names of these tanks. If we had a list of them in Singhalese, we might probably identify most of them.

In this manner, having augmented nine-fold the revenues of the State from what they were, the wise King caused the country to be so prosperous as never to know the calamities of famine.

He, who was so skilled in the maxims of Government, wishing that there should not be even a small spot of land within his dominions inhabited by men, which should be left unbenefited, formed many pleasant and delightful gardens and groves, full of fruit-bearing and flower-bearing trees and creepers of every variety, fit for the use of man.

Thus did this sagacious Ruler of the land, cause his small kingdom, which had attained prosperity, by the superiority of his wisdom, to surpass other great kingdoms in affluence.

The 98th chapter of the Mahāwaṃso, entitled "the Advancement of the Prosperity of the Kingdom," composed both to comfort and to afflict righteous men.

---

*Extract from CHAPTER LXXIX.*

This supreme of men, for the purpose of averting the calamities of famine, constructed many tanks and canals in various parts of the Island.

Having turned the course of the river *Kara-gaṅga*\* by means of a great stone embankment, and having by means of a great canal, called *A'kṣa-gaṅga*, 'Celestial river,' conducted its broad stream to the Royal Palace, which was a noble one, resplendent like the sun,† he constructed the "King of Tanks," (*Wāpi-rāja*) celebrated under the name of the "Sea of Parākrama," which was like unto a second ocean, and which contained a perpetual supply of water.

He likewise built the great tank known by the name of the "*Lake of Parākrama*," having an inaccessible stone aqueduct of 100 cubits. Also the tanks of *Mahinda*, *Ekāha-wāpi*, (literally) "the Tank

---

\* Major Forbes states that the river *Amba-gaṅga* is joined "by a considerable stream," called *Kaḷu-gaṅga*. Might not this be the *Kāragaṅga* alluded to here? The Pāli form of *Kaḷu-gaṅga* would be *Kāla-gaṅga*, the only difference between it and *Kāra-gaṅga* being the substitution of the letter *l* for *r*.

† Instead of, "which was a noble one, resplendent like the sun," ("චරොසුරදිසං.") some MSS. have "සාරොසුරදිසං," which may be translated "making a shining or splendid Island."

of one day," the *Ságara* ('Sea') of Parákrama,<sup>o</sup> and the waterfall of *Koṭṭhabaddha*.

In many places, the chief of men, built minor tanks in number, one thousand four hundred and seventy-one. The Ruler of the land constructed conduits, and channels of stone, in no less than 300 tanks which had been in ruins.

The King also repaired many ancient tanks, such as the great tank of *Maṣihīra* (Minnéry,) the tank of *Mahádāragalla*, the tank of *Suvannatissa*, *Dūratissa*, and those named *Kāla-wāpi* (*Kalāwewa*), and *Brāhmaṇagama*. The tanks called *Nālikēratthamba*, and *Rehēra*, likewise the tanks of *Giritāla*, and *Kumbhīla Sobbha*. The tanks of *Kana-wāpi*, *Pādi* and *Kaṭigama*, the tank of *Pattapāsāna*, the tank of *Mahaṇṇa*, the tank of *Mahanāmanamattaka*, the tank of *Waḍḍhana*, and the tank of *Mahadanta*, the tank of *Kanagama*, and the tanks of *Wira*, and *Walahassa*, and that called *Suramāna*, the tanks of *Pāsānagama*, *Kālawalli*, and *Kāhalli*, and those named *Aṅṅagama*, *Hillapattakkapaḍa*, and *Madagu*. These tanks which had been in ruins, did the King restore to their former condition, as well as others of less note, in number 467.

In about one thousand three hundred and ninety-five tanks, did the king, who was a proficient in matters of State, effect repairs and improvements.

[For the remainder of this Chapter, see *Ceylon Almanac*, 1834.]

\* This is either a clerical mistake, or there were more than one "Sea of Parákrama." While on this subject, I may here notice a very curious passage in the *Rāja Ratnākara*, which speaks of the construction by Parákrama Bāhu, of three great tanks known by the names "Mahā Samudraya," "Bana Samudraya," and "Matī" or "Mani Sāgara."

This passage is translated by Upham as follows:—"The said king of Ceylon also rendered his fame great by causing to be made in Ceylon three great lakes, the first of which was called Mahā Samudra (i. e. allied to the sea,) and the third was called Mēḍa Sāgaraya (i. e. the middling sea.)"

It is however, right to add, that this passage is not found in the *Saddharma Ratnākara*, from which the author of *Rāja Ratnākara*, has copied, almost verbatim, the events of this reign. Nor indeed is such a passage found in any other work on Ceylon, which I have seen.



## TOPOGRAPHICAL AND STATISTICAL ACCOUNT OF THE DISTRICT OF NUWARAKALÁWIYA.

BY A. OSWALD BRODIE, Esq.

---

THE district of Nuwarakaláwiya may be described as that portion of Ceylon which is included in the following lines :—

I. One running from a point one mile north of Dambulla to another about five and twenty miles west of Trincomalie.

II. A second from the last mentioned spot to the ninety-fifth mile post south of Jaffna.

III. A third running thence to within six miles of Arip্পu.

IV. A fourth proceeding thence south-south-east to a place about twelve miles west of Pomparrip্পu.

V. A fifth joining this last mentioned point with that near Dambulla.

The area of the district is about 2,900 square miles.

According to the last census returns (1852) the population is only 32,103, but this is manifestly erroneous, as there are 10,910 persons liable to the road tax, and the number of able bodied persons cannot well be more than one-fifth of the community. As all these returns are more or less erroneous, (giving the numbers too small, as the headmen persist in omitting numbers of women and children,) we may safely reckon the population at about fifty-five or sixty thousand.

The number of houses appear to be 9,804, which would give  $3\frac{1}{9}$ th persons to each house, but it must be observed, that headmen frequently apply the term “house” to a range of contiguous dwellings.

The district on the whole is flat, not, indeed, flat in the same sense as the land near Maṇṇár, Jaffna, &c., is flat, but it is not in any sense mountainous ; the general surface consists of gentle undulations, and here and there isolated peaks or short ranges of hills appear. These are most common in lines north-east and south-west of Dambulla, and within twenty or thirty miles of that place, elsewhere they are of rarer occurrence and of less elevation. To the north, south, and south-west, of the station, hills entirely disappear. The southern part of the district forms in fact the extreme northern verge of the great central mountain mass of Ceylon, and the isolated hills are outliers thereof.

The whole face of the country, except where occupied by fields or tanks, is clothed by dense forest ; and a large tract lying to the south, south-east, and south-west, of the station is almost uninhabited. This arises in part from a want of water, and in part, as has been remarked, from the policy of the ancient rulers of the Island, who interposed this barrier between themselves and the marauders who were wont to infest the maritime districts. There is yet another circumstance which probably has not been without its influence: I refer to the intense dislike which the villagers have, to contact with strangers. So strongly does this feeling still exist, that we have even now to take the greatest care not to bring roads too near to villages, as in this case the people invariably abandon their dwellings, and migrate to some neighbouring, but more secluded, spot.

The prevalent rock is gneiss, the colour and structure of which vary considerably in different localities. It is frequently traversed by veins of quartz and felspar ; but no circumstance of interest connected with these has attracted my notice. This gneiss here, as elsewhere, has a tendency to exfoliate in layers concentric to the present surfaces, the plates which thus scale off are of all thicknesses, from two feet downwards. This peculiarity renders it a matter of ease to split off tolerably regular pillars and slabs, and there can be no doubt that this circumstance has had a very considerable influence on the character of the national or adopted architecture.

Imbedded in the gneiss, at various places, one finds magnesian limestone, generally of a brilliant white colour and of a coarse crystalline structure ; occasionally it contains crystals of hornblende, and also orange-red spots, the composition of which I have not ascertained. The stone bears a good polish, and I am now trying it for flooring, a purpose for which it will, I think, be found well adapted, being clean, cool, cheerful looking, enduring, and ornamental. It is only within the last couple of years that the majority of the localities where this mineral occurs has been ascertained, and the discovery happened most opportunely, as numerous public works are in progress or contemplation. Hitherto lime has been brought from Arippu, a distance of forty-four miles.

In the early part of this year, I discovered in the bed of the Kalu-ár, about six miles east of "The Doric," a number of fossil shells and corals converted into a beautiful semi-transparent amber-coloured mass ; the associated nodules of variegated chert also contain numerous petrifications and casts. I was unable to examine the beds at leisure, and therefore only obtained mutilated specimens, but judging from these, I should think that these limestone strata belong not to the present, but to the tertiary formation.

On a late circuit Mr. Quinton pointed out to me considerable quantities of a dark, heavy, metalliferous stone, which has all the outward appearance of furnace slag. The native tradition is, that it is the refuse from the forges of giants who lived of old ; but as I have since found it in many places, and as Mr. Quinton tells me that it is common over a large part of the Mullaitivu district, I am inclined to hope that it may be a natural product, and have instituted inquiries into the matter.

The soil of the district is generally of a reddish hue, occasionally intensely so, but, where liable to inundation, whether natural or artificial, it is darker and richer. Potter's clay is abundant, but so far as I know, none of it is adapted to the manufacture of the finer kinds of earthenware. The soil, on the whole, is not unfavorable to cultivation.

There are no natural lakes nor thermal springs in the district, nor are there any perennial rivers. The following are the principal streams, which in the wet season contain large bodies of water.

1. The Dambulu and Mirisgóni-oyas, take their rise near Dambulla, and with some others of less importance, empty themselves into the great Kaláwewa tank ; their united waters on leaving this assume the name of Kalá-oya, which for many miles forms the boundary between this district and Seven Kóralés, and ultimately falls into the sea near Pomparappu.

2. Kalankutti-ęla and Siyambalangamu-oya, are tributaries of the former, which take their rise some fifteen miles west of Dambulla, and also form, for some miles, the limit between the same two first mentioned districts.

3. The Malwatu-oya ; one branch takes its rise from the great Éruwewa tank, is called there Gal-oya, and a little lower down Karunagala-oya ; a second branch rises from the foot of Rięigala-kanda (the first hill in Nuwarakaláwiya) and joins the former a little to the east of the Central road. The united stream flows into the deserted tank of Náchcha-dúwa, which gives it a local name. Still lower down, that is, in the neighbourhood of Anurádhapura, the river is called Malwatu-oya, and flowing to the west-north-west falls into the Kanadará-oya, two miles south of Kappáchchi in the Maņņár district.

4. The Kanadará-oya, of which there are two great branches, the Saņgili Kanadará, taking its rise in Kęndé Kóralé, and Mahá Kanadará-oya, in Kanadará Kóralé. These unite about three and a half miles west of the central road, and this united stream falls ultimately into the sea, near Arippu, under the name of Aruvi-ár or Pár-ár.

5. The Bú-oya or Pí-ár, rises in Kađawat Kóralé, forms for some distance the northern limit of this district, and finally joins the Aruvi-ár.

6. The Yán-oya has its source in the great Huruluwewa, and falls into the sea between Trincomalie and Kókilé, being known there as the Kallu-ár.

## BOTANY, &amp;c.

Though the whole district is covered with jungle, the quantity of useful timber is surprisingly small. In fact this remark is applicable to Ceylon generally, to a much greater extent than many imagine. The fact is to be attributed, mainly, to the great development of the chena system of cultivation, which is hereafter noticed.

The Dutch were, with regard to the protection of timber, and also in some other respects, much more provident than the English have shewn themselves; they planted teak forests—we sell them for a tythe of their value, and then import timber from abroad.

The most valuable timber trees of the district are the following :—Palu, Halmilila, Milila, Satinwood, *Sweetenia chloroxylon*—the Buruta and Wiranda of the natives, Kubuk or Kumbuk (*Terminalia alata*), Tammanné, Mígaha (*Bassia longifolia*), Kiri Kón, Ebony.

Of cultivated trees we have the following :

Cocoanut (*Cocos nucifera*), which does not succeed nearly so well as in the maritime districts. The produce does not by any means equal the demand; the usual rate of exchange is two cocoanuts for one seer of rice. Palmyra palm (*Borassus flabelliformis*); not common, and little prized. Talipot (*Corypha umbraculifera*); seldom met with, except in the south-east part of the district. Jack; rare, though in some villages it bears readily. Mango; very rare.

Of the smaller fruit-bearing trees and plants, the following are to be met with in gardens; orange, lime, papaw, pine-apple, murunga, pomegranate, plantain, brinjal, (*Solanum melongena*); baṇḍakka, (*Abelmoschus esculentus*); tampalá, (*Amaranthus*); patóla, or snake-gourd (*Trichosanthus anguina*); besides a few varieties of gourd, melon, and bean. On none of these is the least care bestowed, and the produce is in every respect inferior.

The following are some of the plants which I have introduced :

Casuarinæ.	Dwarf cocoanut.
Sissu.	Double pomegranate.
Logwood.	Various species of stramonium.
American sumach.	Do. plumbago.
Bourbon and New Orleans cotton.	Do. roses.
Madagascar plum.	Do. plantains and bananas.
Nam-nam.	Teak.
Leetchée.	Myrtle : with numerous ornamental plants.
Cape cabbage.	
Travellers-tree.	
Date.	

For these I am chiefly indebted to Mr. Dyke, Agent for the Province ; to his Assistant, Mr. Twynam ; to Mr. Thwaites, Superintendent of the Royal Botanical Gardens, and to A. Y. Adams, Esq., of Petula.

Of all these before mentioned plants, the natives are encouraged to take seeds, slips or roots.

### PRODUCE OF DISTRICT.

The staple product of the district is paddy, grown in the manner usual throughout the low country, that is, in low, gently sloping lands, irrigated from artificial tanks, some of which are many miles in extent.

Each village is settled by a little colony, headed by two or more leaders or elders, called *Gamarálas*.

After the ground has been cleared of jungle, a line is stretched down its length, then measuring from the bank, marks are put in, say at every ten fathoms, and each portion is given to a villager. If the soil varies greatly in the upper and lower parts of the field, or if one of these be for any reason preferable to the other, then each villager ("shareholder," or "partner," is the common term) will get one share in the upper, and one in the lower part, of the field.

To the *Gamarálas* a double portion is given, in consideration of their superior position as village elders. It is to be observed,

that every shareholder has a right to all the land enclosed within lines running across the field and passing through the two stakes on the centre line which originally marked out his portion ; that is, each man, commencing within his own portion at the centre line, may clear to the right and left till he reaches the high grounds which enclose the field ; but quarrels would instantly arise if he were to clear either up or down, as it were, round the share of another. So soon as a share is allotted to a man, no matter whether he clears much or little, he comes under certain obligations ; he must give one share of work to all repairs of the tank, and to the watching of the fields by night, and to the construction and up-keep of a ring fence. The original division is never lost sight of ; thus, if two shares, even though they be contiguous, fall into the possession of one man, he will never talk of having "one large share," but of having "two shares," and will give two shares' work to watching, fencing, and repairing of the tank ; so it is also with half or quarter shares.

The first and last shares, those at which the channel from the tank enters and leaves the field, are generally less productive than others. For this reason, and also because there is a larger quantity of fencing there, these shares, called the *ihala* and *pahala elapaṭa* (shares at the upper and lower water-courses) respectively, are invariably larger than the rest.

It frequently happens, that either before or after sowing, it is found that the supply of water will not be sufficient to irrigate the whole field ; in such cases the people resort to a practice called *betma* or "division." A portion of the field, of suitable size, is selected, and all the rest is abandoned. The selected portion is now divided into the same number of equal shares as there are original shares in the whole field, and every original shareholder gets one *betma* share for each original share in the whole field ; and this in no way depends on the amount which he has cleared in his original share. Thus, suppose a man through idleness has not cleared any of the ground allotted to him, but has yet given, when required, labour to fencing, watching, and repair of tank, then when *betma* is

resorted to, he will be entitled to a *betma* share, equal to that of his neighbours. It is to be observed, that the persons whose land is thus selected, do not get larger allotments than others. Frequently, the selected portion of land is worked in common, and the produce divided among the peasants according to the number of shares which they hold in their own right ; at other times, it is actually subdivided, and each reaps the produce of the portion allotted to him, just as if it were his own ground.

Each such *betma* arrangement is binding only for one crop ; when it has been removed, matters revert to their original position.

Other customs connected with paddy cultivation, are as follows :—

If a man's *betma* share is denied to him, then he has a right to demand a supply of water for his original share ; if he insists upon this, it would in many cases happen that both his and his neighbours' crops would die ; an amicable arrangement is therefore generally made.

If a man refuses to give his due share of work or money to the repair of the work, he cannot lead water to his field till he has repaid those who laboured for him.

If owing to neglect, as to fencing or watching, cattle or elephants damage the crops, then the man in fault must make good the loss.

If a man, after being warned that his cattle trespass, fails to yoke them two and two, or else to tie cross bars to their necks, he is liable for all damage which they do.

If shareholders neglect to cultivate their fields for any particular crop, then those who do cultivate are entitled to select and to cultivate contiguous lands equal in extent to their own ; the object of this is to lighten the labour of watching, fencing, and irrigation, which would become very harassing if the cultivated portions of the field were isolated.

Several of these rules appear to me admirably adapted for the people and country. The people are naturally lazy ;



here are stimulants. They are poor, and have not a sufficiency of wholesome food ; here is security for the land being cultivated by some one.

There are certain privileges attached to each village, as for example, the collection of honey throughout all the jungle attached to it ; one-half of the game killed ; one out of every two tusks " bagged " in these ; and the right of fishing the tank. All these rights give rise to constant squabbles.

The chief varieties of paddy cultivated in the District are :

*Dik-vi*  
*Ilankáliyan* } ; in virgin soil.

*Mahá-vi* ; for *táwalu*, as it does not die though overflowed.

*El-vi* (*sudu* and *kalu* " white " and " black, ")  
*Kuru-vi.*  
*Hinaí.*  
*Murunga-vi.* } for paddy fields.

These vary in colour, size and taste. Their most important distinction, however, refers to the length of time which they require for attaining maturity ; some take three, some four, some six months.

There are two crops annually ; that sown in December and reaped in March or April, gives the *Yala-mósama* in August and September. Occasionally, when the weather is favourable, and the preceding harvest has been lost, a crop is taken between the intervals, and is simply called " a between two years crop " *déivurudda ataré mósama*.

The return from paddy fields according to the reports of the headmen, varies from four to ten-fold ; but there can be no doubt that the crop is frequently much heavier than this would induce one to suppose.

Another method of cultivating paddy is called *tawálu* ; in this case the margins of the tanks themselves are cultivated, and the water for irrigation is raised by means of scoops, such as are in use at salt pans. This system gives larger returns

than field cultivation, but the requisite labour is greater, therefore it is not in favour with the Siphalese ; the Moormen carry it on to a considerable extent.

A third system of paddy cultivation is on elevated ground, so called, high lands, in exactly the same way as other chéna crops are grown ; in this case irrigation is not applicable, and the crop is totally dependant for moisture on the natural fall of rain. The return is large, but the risk of losing one's labour is great.

I am sorry to say, that the general food of the people is not rice, but *kurakkan* (*Eleusine coracana*) which is grown in chénas. These are pieces of land on which the smaller trees and brushwood are cut down and burnt, the thicker branches are in this way merely charred, and being piled round the enclosure, form a tolerably good fence. The seed is sown broadcast, and then covered slightly by aid of that useful implement, the mamotie. A man can sow and cover about a seer of *kurakkan* seed in a day. It rarely occurs that more than two crops are taken from one chéna ; after the last of these has been removed, the jungle is allowed to grow up, and is not again cut till after the lapse of from five to fifteen years. It is evident that this system must prove most destructive to timber, as new land is cleared every year.

In these chénas various other plants, such as millet, &c. ; as also varieties of gram, &c., are cultivated. One of the most useful of these, so called, fine grains, is the *tala* of the Siphalese (*Sesame, Sesamum Orientale*.) which yields an oil used for lamps and in medicines. The price of the seed is about a penny per seer, and large quantities are sold to *taxalam* people from the low country, and to dealers at Trincomalie and Higgolla Mátalé. The people are fond of cultivating this plant, and if an English merchant would make arrangements for purchasing it here, or at the neighbouring ports, the cultivation might be increased to a great extent.

Cotton is also grown in *chénas*, the seed being placed in the ground along with that of *kurakkan*, which grows faster, and is removed ere the cotton has approached maturity. The extent of such lands are always estimated by the quantity of seed *kurakkan* required ; and about four seers of cotton seed are sown with one of *kurakkan*. The cotton is sown about October, before the monsoon rains set in ; the pods begin to burst in about eight months ; and during the three following months the produce is gradually removed. If the plant be cut down at the close of the season, fresh shoots appear, and a second crop equal to the first is obtained, if the soil be good. From certain memoranda, collected by a predecessor about fourteen years ago, I glean the following information regarding a piece of cotton soil.

It measured eight seers of *kurakkan*, which, as before shewn, is equal to thirty-two of cotton. A man was employed forty days in cutting down the jungle, twenty more in lopping, and twenty-five in burning it, and removing the rubbish. The soil being good, the plants attained a height of six feet. This *chéna* yielded 30 *welis* of cotton in the first season, and this was about four bullocks' load, worth 6s. 8d., per load. The cotton is sold with the seeds unremoved.

One person will, in a day, clear a *welli* from its seed, and in four days will spin it into thread. This quantity is sufficient for a piece of cloth ten cubits long, and four spans broad. A weaver will complete this in three days, and receives in payment one and a quarter parras of *kurakkan*, or half this quantity of paddy. It is to be observed that there is not, and never was, a tax on cotton cultivation, so the above information may be looked upon as tolerably correct. From it we learn, that, in 1838, a man's labour was freely given during at least eighty-five days to the working of a *chéna*, the produce of which sold for £1 6s. 8d., which would give about 3½d. per diem ; but the cultivator, after reaping his *kurakkan*, had to watch the cotton for nearly seven months, and had to collect, dry, and pack the produce.

At present, the people seldom get more than 3s., for a load of cotton ; this is attributed to the vast quantities of cloth now imported from India and England.

Being anxious to multiply as much as possible the varieties of plants on which the people depend, I applied for, and obtained from Government, two sacks of Bourbon and New Orleans cotton seed, which I am now distributing among the people, who, however, shew their wonted apathy on this occasion also.

High forest land is invariably selected for cotton.

Tobacco, when grown at all, is only found in small gardens, containing forty or fifty plants.

With regard to chénas generally, it must be observed, that, unlike paddy fields, they belong not to individuals, but to villages collectively ; and it is by amicable arrangements among themselves, that it is in each season arranged what portion shall be allotted to each man. As a general rule, all land from which water drains to the tanks or field of a certain village belongs to that village ; and to its inhabitants is reserved the right of cutting chénas within the limits so defined.

For some reason, which I do not know, chénas are not portioned off by parallels, but by radiating lines from some central spot, such as a large tree, boulder, &c.

#### INHABITANTS.

The mass of the inhabitants are Siphalese, approximating in manners, feelings, and appearance to the Highlanders, and not to the degenerate race which swarms in the maritime districts, and for whom they entertain a thorough contempt. Every man is a cultivator or proprietor of land, and I do not suppose that there is one Siphalese villager who is to any extent dependant on a trade for livelihood. Many persons are by caste mechanics, as blacksmiths, goldsmiths, washers, tom-tom beaters, &c., but the last two bodies alone devote any attention to their hereditary business, and even their reward consists not in money, but in land ; thus the people of a village will give a piece of land to some dhobies on condition that they

wash for them and attend on occasions of ceremony ; so it is with tom-tom beaters. If a man wishes to get a new axe or mamotie, he first of all goes to Trincomalie, Anurádhapura or Maññár, and purchases some iron ; he then prepares a quantity of charcoal, and taking these, proceeds to some neighbouring blacksmith, who is brought into good humour by the gift of some cakes, &c., and is perhaps ultimately persuaded to undertake the work, which, however, proceeds slowly and gravely, several days being occupied in working and talking about the work : all this time the applicant renders assistance to the smith. I have never been able to induce a village mechanic to settle here ; they like receiving money wages, but cannot bear regular hours. Of late, in consequence of public works being commenced, a few masons and carpenters are to be found at the station ; but all are strangers to the district.

To shop-keeping of every sort, the highland Sinhalese have an insuperable objection, and thus it occurs that the boutiques along the roads are all occupied by Tamils, Moormen, or low-country people. It is only in such situations that boutiques are to be found. In the villages themselves they are unknown ; each man grows his own paddy and *kurakkan*, has his own cattle, and probably cultivates a few vegetables in his garden. If he wants a new cloth, he gives the cotton from his chéna, and also some grain by way of fee to a weaver, or else he barter the product of his field with some passing trader.

Until of late years, bare money was almost unknown in the district, but is now becoming more common every day. In all dealings among themselves, however, the natives adhere to the system of barter. The change already referred to, may be attributed chiefly to the fact that payment of taxes in kind has been done away with, and that the taxes in themselves are heavier. I am quite aware that many persons consider it an absurdity to maintain, that people can be better off simply because they are taxed, because money is taken from them ; such is, however, the simple fact. The manner in which it works is probably thus :—A man knows that he will shortly have to pay to Government a couple of rupees ; none of his

neighbours will pay him for anything in cash, he therefore finds it necessary to grow something which he may sell to strangers, and he soon discovers that, *ceteris paribus*, the less bulky these goods are the better, after providing for the daily wants of himself and his family; he will therefore clear a chéna and cultivate, say *sesame*. The produce he then removes to Trincomalie, and sells for cash. He now finds that the sum he has received is greater than the amount of tax which he must pay, and in wandering through the bazaar his fancy is struck by some gaudy handkerchief, some bright brass vessel, some china, &c.; he buys the article and returns home. The sight of these purchases gives pleasure to his household, and creates in them new desires and new wants. To gratify and relieve these, he will in the next season clear a still larger chéna, and so the process continues. The increasing influence of money is strikingly apparent in the instance of headmen and people of family, who now care much less than heretofore about keeping up large bodies of dependents. In a paper on the statistics of the Puttalam district, which I had the honour to transmit to the Society some years ago, I shewed that the fishers there were most anxious that the now discontinued fish-tax should be renewed; and, on the whole, I believe, that at present the people ought to be comparatively heavily taxed, not indeed to such an extent as to discourage them, but to such that they may be incited to industry.

The castes are the same as those in other districts, with this exception, that there is one here not general over the Island, and which is superior to that which is elsewhere considered the highest—I mean the Wannī caste, who call themselves *Wannīwaru*, the latter being a mere honorific. These persons are the descendants of certain Tamils who came over from the continent in the time of Rāja Sen, who granted to each extensive tracts of land. They are very numerous here, and very troublesome, as they will not accept any inferior appointments, and for the most part think it quite beneath their dignity to educate themselves. As their claim to fill all the high offices has been rejected, they now frequently intermarry

with Vellálas, and will in all probability soon be incorporated with that caste.

Considerable numbers of domesticated Vēddás are to be met with, but none of those who still retain their primitive wildness reside in the district.

Six or seven villages of the Eastern division are inhabited by a set of people who have much the look of Moormen. If asked to what caste they belong, they reply : " We are from *Kurunégala habáge*." Their neighbours call them "*Wageyei*," a name which they do not at all like. They do not intermarry with the people of the district, and seek for wives either in their own villages here, or in those of their comrades in Seven Kóralés. They preserve a tradition, that many centuries ago their forefathers came from Málwar, but do not know where that place is. They seem to be a sort of Duriyás.

The Moormen or Mahomedans occupy numerous villages ; they are locomotive, enterprising, fond of trade, and very deceptive. Their love of money is a perfect disease ; they are more robust, intelligent, and bold than the Sinhalese, and are very much disliked and feared by them.

Many individual Tamils have settled in the district, but I am not aware that any one village is exclusively occupied by them.

A few Kaffres and Malays occur here ; the former chiefly discharged soldiers and their offspring ; the latter, people, who, as I believe, have some very good reason for living in secluded spots.

Two circumstances exercise a most beneficial effect on the people ; the first, that for the last three years there has not been a single tavern in the district ; the latter, that there are no resident proctors. Of course I do not mean to deny that many proctors may be good and honest men, nor that such are very useful ; but it is evident that proctors who would settle in such a district as this, must be the very refuse of their profession, and such men would be a curse to the district.

## EDUCATION.

About eighteen months ago an English school was set on foot, and is still maintained. Owing to the liberality of Government no fees are demanded from the scholars, it being considered that the people must first learn what education is, before they are asked to pay for it. The number of scholars is only 13, but when a sort of boarding house now in contemplation shall have been constructed, the number may be expected to increase considerably.

A Tamil school, supported by private funds, is attended by a few scholars, but there is a constant succession of new faces ;—so soon as a boy can read a little and scrawl his name, he sets up a boutique.

The best effects have followed from the strict examination to which applicants for headmanship are subjected, as to their proficiency in reading, writing, and arithmetic. In the latter respect, the progress is most marked, and has been assisted by the distribution of suitable books of instruction.

This being one of the most sacred spots of Ceylon, it might be expected that I should have much to say regarding the Buddhist priesthood. This, however, is not the case ; the priests here are ignorant beyond description ; know nothing of their own history or religion : and though they say that they have a copy of the Maháwapso, acknowledge that they have never read it. As they do not take the slightest trouble with the people, and generally disappear until the time of the festivals approaches (at which period offerings to a large amount are brought in), the people are heartily wearied of their yoke, and if no external aid be afforded to the religion, it will soon be practically extinct.

I confess to having an extremely low opinion of the Buddhist priesthood. To judge from those whom I have met (the number is not small), I think they will be found idle, selfish, inconsistent and, *ex-officio*, discontented.



## MEANS OF COMMUNICATION.

There are no navigable or perennial rivers, and no canals in the district ; and the trade of the country will not for a long time to come justify Government in altering this state of matters. Up till the year 1845, the only road in this district was that from Maññār to Anurádhapura, along which the tappal has hitherto been carried. About the period mentioned, a sudden advance was made ; a great central route passing from north to south, and opening the communication between Jaffna and Kandy, having being surveyed and cleared ; others leading to Trincomalie and to Puttalam were also opened, so far as they lie within this district.

That most excellent of laws, the Road Ordinance of 1848, has here, as elsewhere, effected much good ; it is only necessary to remark, that the following works have been carried out within the last three years :—

I. The central line between Jaffna and Kandy has received general and extensive repair.

II. A substantial bridge, with three water-ways, has been constructed over the Sangili Kanadara-oya.

III. The Puttalam road has been brought into such a state of efficiency as the present nature of the traffic requires.

IV. Similar improvements to the Trincomalie road have also been carried out.

V. The Maññār road has received general repair, though no permanent bridges have been made.

VI. A road between Madawachchi on the central, and Horowepotāne on the Trincomalie road, has been surveyed, traced, and cleared throughout its whole length, though a few miles are still not available for cart traffic.

VI. Another line joining Kekirāwe on the central, with Mārāgahawēwa on the Puttalam road, has been surveyed, traced, and opened, throughout about 24½ miles of its course

VIII. A line joining Mahākekirāwe with Horowepotāne, (oth as abovementioned,) has also been traced.

IX. And lastly, a line from this to the Mannár road near Adapankulam, has been surveyed, and in a great measure traced.

The whole amount collected during each year since 1850, is as follows :—

Year.	No. liable.	Value in Money.		
		£	s.	d.
1850	10,117	758	15	6
1851	10,923	819	5	6
1852	10,910	818	5	0
Total...	31,950	2396	5	0

It will be observed, that the rate of commutation fixed for six days' labour, is only 1s. 6d. This is just half of the real proportion ; but this arrangement was purposely adopted, on the supposition that hired coolies do more work than statute labourers ; besides which, this system enables one to concentrate one's efforts on such roads as most immediately call for attention. I think, however, that these advantages have been over-estimated, and that the rate of commutation should have been higher.

Of late years, a good deal has been said about the desirableness of giving to the natives Municipal privileges, and it was hinted that the Road Ordinance was but the first step in that direction. In those districts with which I am best acquainted, the hopes of the Progressists have been woefully disappointed ; the people frequently not shewing the slightest interest in the elections ; not recording their votes ; not even taking the trouble to attend.

There being little trade in this district, and the people having a great dislike to strangers and to bustle, the Road Ordinance is even now far from popular ; but the more intelligent villagers are becoming convinced of the advantages which it secures to them.

#### CLIMATE.

Some one said long ago, that the climate of Nuwarakalāwiya was very deadly—that the place was a second Sierra Leone ; and no amount of proof to the contrary has yet dissipated this absurdly erroneous opinion. It is quite possible, that twenty or thirty years ago, fever was more prevalent than at present ; but I do not know of anything to warrant the conclusion, that even at that time it was unhealthy during the greater part of the year. Situated in a vast plain, which is covered with dense wood, and in which there is a multitude of neglected tanks, the place is certainly no sanitarium, but still I think that during nine months of the year, it is fully as healthy as most stations. The unhealthy season lasts from the beginning of December till the end of February, and during this portion of the year the establishments are allowed to remove elsewhere. As the jungle around the station becomes cleared away, and as the place becomes more healthy, the furlough allowed is gradually circumscribed, and in the course of a few years, there will probably be no occasion for an annual interruption of public business. The fever of Nuwarakalāwiya is distinguished less by the violence of sudden isolated attacks, than by its insidiousness and long continuance. One is never very ill, but neither is one ever very well ; one feels a general listlessness, a sensibility to the effects of draughts, which gradually debilitates one to a lamentable extent.

It is a common remark of the people, that draughts are much more common now than they used to be twenty or thirty years ago, and this is—justly, as I believe,—attributed to the great extension of the chéna system, whereby pools, springs, and marshes are dried, and large surfaces exposed to the burning rays of the sun. I regret to say, that my manifold engagements, and

frequent absence from the station, have prevented me from making any regular meteorological observations.

### ANTIQUITIES.

Nuwarakaláwiya has a degree of local celebrity, from having, during many years, been the residence of the Siphalese Rájás.

We learn from the Maháwapsa, that Prince Wijaya established himself at Tambapanni or Tammannaḍawiya, near Puttalam, about the year 543 B. C. His successor, in 504 B. C., removed to Wijitapura in this district. Paṇḍukábhaya who followed in the year 474 B. C., took up his residence at Anurádhapura ; and from this time till A. D. 729, Anurádhapura continued to be the metropolis of Ceylon. About the year 307 B. C., the *thero* ('saint') Mahindo, son of Dhammágoka, Emperor of India, introduced Buddhism into Ceylon. It was then that the branch of the sacred *Bó-gaha* (*Ficus religiosa*) was brought to, and self-planted at, Anurádhapura ; and here, enclosed in a triple terrace of masonry, it still exists, and still attracts annually thousands of pilgrims from all parts of the Island, and occasionally also from India, and even from Siam ; and it is here that the yet venerated Duṭugemunu, about B. C., 161, expended a vast amount of labour in erecting those bee-hive shaped edifices called *dágabas*, *chaityas*, or *thúpas*, which enshrine relics of the philosopher Buddha ; and which, though time has impaired the symmetry of their form, still tower in solemn grandeur over the surrounding forests, and proclaim to the yet distant traveller the locality of the sacred city. Seven or eight *dágabas* of various sizes are scattered round the station : these with carved step-stones, and altars, pillars, capitals, and images of Hindú deities, with long stretches of low mounds and walls, form the chief antiquities to be found at the station, and attract notice, rather from their vast number and extent, than from any other quality they possess. They are interesting as marking the period when Siphalese genius and enterprize reached their zenith ; and to the eye of the engineer, the accuracy of the work is a matter of just admiration.

The *Mahá Lohapásáda*, will much disappoint the visitor. It consists simply of a solid square of roughly squared slender pillars, 40 in each row, and rising about 9 feet above the general surface. Each side of the square is 221 feet. There can be little doubt that these pillars were the mere foundations of a huge pyramidal wooden structure, nine stories in height, which must somewhat have resembled the so-called Chinese porcelain towers, and which, when decorated in the Siphalese fashion, must have formed a very striking, if not a very beautiful object.

It is impossible for me here to describe the various antiquities round the station. Perhaps a future paper may be devoted to the subject.

Some time ago I commenced a large scale plan of the ground around the station, but want of leisure has forced me to abandon the work.

Mihintalé, eight miles east of Anurádhapura, is much resorted to by pilgrims; for there stands the oldest of the *dágabas*, and there the great teacher Mahindo expired. A fine view, stretching probably from sea to sea, and far up to the Mátalé hills, is obtained from the summit.

At Owkonna, about twenty-six miles south of Mihintale, there is a colossal erect statue of Buddha, about 35 feet in height; it is cut out of solid rock, to which it remains partially attached. The right hand is raised as in the act of benediction.

Wijitapura, near Owkonna, has been already mentioned. A siege which it underwent is minutely described in the *Mahá-wapso*; but on enquiry, I could not ascertain the existence of any walls or other structures, except a small half-ruined *dágaba*.

Close to the southern extremity of this district, but just within the limits of Seven Kóralés, at Seseruwa-kandé Viharé, there is a statue of Buddha resembling in size and position that at Owkonna.

Both here and at other parts of the district, I have met with and copied numerous inscriptions ; but regarding these deem it unnecessary at present to do more than state, that the characters employed are not to be found in any of the alphabets in my possession.

#### FISCAL ARRANGEMENTS.

This district always formed an integral portion of the Kandyan Provinces, being specially entrusted to the third Disáwa for the time being. The last of these appears to have been Talgahagoda Disáwa, who seems to have resigned about the year 1833. It was about this time that the district, as it now exists, was formed by adding some portions of Mátalé and Seven Kóralés.

Until a few years ago, the native headmen consisted of Mahá Wanni Unnehes, Wanni Mudiyanases, and Kariyakarannas, all these being connected with both the Revenue and Police Departments. At present we have Divisions, Kóralés and Tulánas, under Raṭémahátmayás, Kóralés, and Lékamas ; of the first there are 3, of the second 17, of the third about sixty.

Raṭémahátmayás receive £2 10s. per mensem, besides five per cent. on the revenue collected from their divisions.

Kóralés receive five per cent, on their collections, and hold, free of tax, such lands as they possess within their own Kóralés.

The Lékamas, unlike the two other grades, are at present regarded solely as Police Vidánes. As a matter of fact, however, they remain, as formerly, general assistants of the Kóralés ; and this arrangement ought, I think, to be again formally sanctioned. They hold, free of tax, such of their lands as lie within their own Tulánas, and do not receive stated salary, nor percentage.

It is probable that the system of allowing headmen to hold land tax free, will soon be altogether done away with. It has been maintained, probably with the intention of obtaining the services of men personally interested in their own divisions ; but this object can be otherwise secured, and a constant source of demoralization cut off. At present, quantities of land, are to

escape tax, entered in the names of headmen, who after the lapse of some years claim, and frequently take possession of the lands themselves. At the same time, I see no objection to employing unpaid headmen, so long as the offices are eagerly sought by the people. The Singhalese love of honor and distinction, though carried to somewhat unreasonable lengths, is in itself laudable, and gives a *point d'appui* to those who wish to elevate the people. In our own country, many offices unconnected with salary are eagerly contended for, and I see no reason why the same system should not be followed here. That unpaid headmen would take bribes is not more true than that the paid headmen now do so.

The headmen are, on the whole, inferior in activity and intelligence to those of adjoining districts. This may be attributed to the fact, that the people were, until lately, almost debarred from intercourse with others ; that the district was formed of fragments taken from others, and which are only beginning to amalgamate into one homogeneous whole ; that the resident civilians have been frequently changed ; that the establishment is necessarily broken up annually ; and that formerly the Wanniya caste had a sort of monopoly of the headmenships ; and even now, many of these people, while they think that they have a right to be made Kórálas and Raṭemahátmeyás as opportunities occur, yet totally neglect their own education, on the plea that they can pay others to read and write for them. I think that a bad effect has been produced by the uncereemonious way in which headmen are appointed and dismissed ; and believe, that Government in giving up all sorts of state and ceremony, is gratuitously throwing away a powerful means of influencing the people.

Whether headmen ought, or ought not, to have more power than at present, is a matter for serious enquiry, but need not be entered upon here.

#### REVENUE.

With some trifling exceptions, the sole source of revenue is the tax on grain.

Formerly this used in part to be paid in kind (*úmanai*), but this gave rise to so much deception and loss, that the plan has long since been abandoned. At present the great majority of the tax is collected by the commutation system. According to this, the average annual produce of each piece of land being estimated, the cultivator redeems that portion of it which would fall to Government. It is to be observed, that the rate of redemption is fixed very low, it being considered that the loss thus occurring is more than counterbalanced by the ease of collection, the fixity of revenue, and the checking of deception. In this opinion I entirely concur, and believe the commutation system to be eminently advantageous, both to the rulers and the ruled. The whole process is as follows :—

The headmen send in lists of the lands, giving the extent and probable produce of each share ; these lists then may be compared with those of former years, so as to expose any fraud, and are then entered in large register-books ; additional columns, shewing the tithe, in grain and in money, being added. There is then drawn out a set of tickets, forming in fact, a copy of the register ; each ticket containing a memorandum as to the amount due on each share. After this is prepared, the Assistant Agent proceeds to some appointed village ; the people assemble ; those of a certain village are called forward ; the first name is read, the peasant comes forward, signs the register, and receives the memorandum shewing what he has to pay, and as the matter proceeds, complaints as to over-estimation, &c., are frequently heard at once, and the requisite alterations made. After all this is done, another set of receipts, corresponding to the entries in the registers, is filled up ; each such receipt is given by the headman to the person whose name is inscribed on it, when he pays the tax due by him. In this way the peasant knows beforehand what he has to give annually, and he cannot be called on by the Kórálá to pay twice over, as used formerly to occur not unfrequently. The headmen, when they bring revenue to the Kachchéri, give in lists of those from whom they have received it, and thus, if a headman dies or is dismissed, there is no difficulty in discovering who is and who is not in arrear.



These commutation settlements are made for periods of five years. It was at one time proposed that they should run for twenty years, but fortunately this scheme was abandoned, as also that of allowing the people to redeem their whole grain tax at ten or twenty years' purchase.

The taxes from *chénas*, *tawalas*, and lands which are cultivated at uncertain periods, are collected by estimation, that is, the growing crop is estimated, and the villager redeems the tythe at a fixed rate, which is somewhat below the market value of the grain; at present it is 8*d.* pence per parra, the market value being from 9*d.* to a 1*s.* It is desirable to check this system so far as circumstances allow, as it is impossible to prevent deception being carried on to a great extent.

The execrable system of farming taxes has never been in use here, and except under very peculiar circumstances I should deplore its introduction.

Fine grains pay no tax, this being a Kandyan district; and really, when a man is reduced to living on *kurakkan* "roties", it would be cruelty to tax him. The only thing that might induce one to lay a tax on these grains would be, the hope of forcing the people to the cultivation of wholesome articles of diet.

It appears that in 1825 the revenue realized from this district amounted to the handsome sum of eleven pounds, thirteen shillings and five pence half penny; and from that time until 1883, it seems to have averaged only £129 13*s.* 5*d.*; after this period, however, rose steadily and rapidly, and now nearly, if not quite, covers the expenses.

Last year, (1852) the grain revenue amounted to £1735 4*s.* 5½*d.* and the whole real revenue, exclusive of road tax, to £1874 16*s.* 5½*d.* This year these items amount to £1021 1*s.* 5*d.*, and £927 4*s.* 4¾*d.* respectively.

Two causes will account for this decrease :—

1. Within the two previous years almost all arrears had been collected.

II. Last year murrain prevailed to a lamentable extent, and so many of the draught cattle died, that large quantities of land were left uncultivated ; and as the people are naturally improvident, they were at once reduced to great distress. On the other hand, the amount due for grain commutation by the settlement just closed, contrasts favorably with that which preceded it, shewing an increase of £74 8s. 0½*d.* A slight examination will leave no doubt that this district is rapidly increasing in wealth and importance.

### CRIME.

The people of Nuwarakáláwiya are the most gentle I have had the fortune to meet. It is true they quarrel a good deal, but these squabbles are generally of the most trifling kind ; the parties after exhausting their list of abusive terms, pull each other's hairs, then shriek and run away from each other, and so the matter ceases. Serious assaults, robberies, murders, are all but unknown, and during three years I have not had to punish one native of the district for pilfering.

Cattle stealing used to prevail to a great extent, but has been much checked since the matter was placed in the hands of the District Judges. It is still carried on to some extent on the borders of Seven Kóralés and, latterly, of Mannár, but three-fourths of the charges now investigated prove utterly false.

The people are fond of litigation, but not I believe to the same extravagant extent as elsewhere, and numerous disputes are settled by reference to the Assistant Agent without going to the Courts of law at all ; and some such system as this seems to be infinitely the best adapted to the people.

### FUTURE PROSPECTS.

The soil on the major part of the district being good, there can be no doubt that agriculture will receive more and more attention. Roads are being formed in every direction, and if Government took up the matter of Tank repair with spirit, I believe that Nuwarakáláwiya would profit thereby fully as much as any district in Ceylon.



**JOURNAL**  
**OF THE**  
**CEYLON BRANCH**  
**OF THE**  
**ROYAL ASIATIC SOCIETY,**  
**1856-58.**

---

---

**VOLUME III.**

---

---

**No. 10.**

---

***EDITED BY THE HONORARY SECRETARY.***

---

"THE DESIGN OF THE SOCIETY IS TO INSTITUTE AND PROMOTE ENQUIRIES INTO THE HISTORY, RELIGION, LITERATURE, ARTS, AND SOCIAL CONDITION OF THE PRESENT AND FORMER INHABITANTS OF THE ISLAND, WITH ITS GEOLOGY, MINEROLOGY, ITS CLIMATE AND METEOROLOGY, ITS BOTANY AND ZOOLOGY."

---

**COLOMBO :**  
**PRINTED AT THE "CEYLON OBSERVER" PRESS.**

---

**1891.**



## CONTENTS.

---

	PAGE.
On the Principles of Siphalese Chronology.—By the Rev. C. ALWIS                   ...           ...           ...	163
Remarks on the Supposed Identity between Nágaséna and Nágárjuna.—By JAMES DE ALWIS, Esq., Assistant Secretary           ...           ...           ...	176
An Introductory Paper on the Investigation of Siphalese Music.—By LOUIS NELL, Esq.           ...           ...	181
A Synopsis of the “Sâiva Siddântam.”—By M. COOMARASAMY, Esq., Advocate           ...           ...	187
Terms of Address and Modes of Salutation in use amongst the Siphalese.—By JAMES DE ALWIS, Esq., Assistant Secretary           ...           ...           ...	198
APPENDIX :—Proceedings of Meetings, &c.                   ...	i

CONTENTS

On the Principles of Algebra  
Rev. O. A. A. A.

Remarks on the Report of  
the Committee on the  
Education of the  
Colored People of the  
District of Columbia

Annals of the  
District of Columbia

Annals of the  
District of Columbia

Annals of the  
District of Columbia

Annals of the  
District of Columbia

# ROYAL ASIATIC SOCIETY, CEYLON BRANCH.

---

## ON THE PRINCIPLES OF SINGHALESE CHRONOLOGY.

---

BY THE REV. C. ALWIS.

---

**TIME** is that abstract duration which pervades all ages, without either a commencement or conclusion. It partakes of many of the most sublime attributes of the Supreme Being, such as eternity, invisibility, omnipresence, immaterialism, and so forth. There is some method of computing it amongst every nation. This computation and adjustment of time form the principles of Chronology.

The most natural division of time seems to be into that of days. Day is called in Singhalese *dawasa*. The interval between two successive risings of the sun is a *dawasa*. Seven *dawasas* are reckoned into one *satiya* "week." The days of the week, as among many other nations even in the West, are appropriated to seven gods, and are called by their names : thus *Iridá* "Sun's-day," *Sundudá* "Moon's-day," *Angaharu-wárá* "Mar's-day," *Baládá* "Mercury's-day," *Brahaspatindá* "Jupiter's-day," *Sikuráda* "Venus'-day," and *Senasuráda* "Saturn's-day,"

*Dawasa* is divided into *dawála* "day time," and *rátriya* "night time." *Dawála* is from the rising to the setting of the sun ; and *rátriya*, begins with the setting of the sun and continues till his rising. From the rising of the sun to his arrival at the meridian is called *pera-waruwa* "forenoon : " and the interval between the meridian and the setting of the Sun is termed *pas-waruwa* "afternoon." "Noon" or "midday" is called *maddahana*.



The night is divided into three equal portions, called *yama* "watch." The first watch is called *pera-yama* or *hēndē yāmaya*. The second or middle watch is called *maddima yāmaya*; and the last watch is called *paṣ'hima yāmaya*, or *pāndara yāmaya*. The midnight is called *maddima rātriya*. The time during which the rays of the sun's light fall upon the ground before his rising above the horizon, is termed *aḷu-yama*, and that of his rising is designated *pāndara*; "morning" in general is called *udaya*.

The natural day is divided into 60 equal portions, each being called *peya*, equal to 24 English minutes. Each *peya* is divided in 60 *windādi*, and each *windādiya* into 60 *tatparas*.

A portion of time consisting of  $2\frac{1}{2}$  *peyas* is termed *hórā*, answering exactly to the Greek and Roman word *hora*, "hour." Astrologers suppose that the same seven gods to whom the supervision of the days of the week are appropriated, preside over each successive seven *hórās*, beginning from that one to whom the day belongs, but in the following order, namely, Sun, Venus, Mercury, Moon, Saturn, Jupiter and Mars. Thus, on Sunday the first *hórā* is of the Sun, the second is of Venus, and the third is of Mercury, and so forth; on Monday the first *hórā* belongs to the Moon, the second to Saturn, and the third to Jupiter, and so on.

The firmament studded with constellations and stars, apparently in an incessant motion from east to west, is divided into twelve portions, each called *rāsiya*, "sign." The names of these twelve *rāsi*, together with the time during which they emerge out of the horizon, are as follows:—

NAMES.	P.	W.	H.	'	"
Mésa ...	...	4 19	Aries ...	...	1 43 36
Wṛishabha ...	...	4 43	Taurus ...	...	1 53 12
Mithuna ...	...	5 17	Gemini ...	...	2 6 48
Karkaṭaka ...	...	5 29	Cancer...	...	2 11 36
Sipha ...	...	5 15	Leo ...	...	2 6 0
Kanyā ...	...	4 57	Virgo ...	...	1 58 48

NAMES.	P.	W.	H.	'	"
Tulá... ..	4	57	Libra ... ..	1	58 48
Wṛiṣchika ... ..	5	15	Scorpio ... ..	2	6 0
Dhanu ... ..	5	29	Sagittarius ... ..	2	11 36
Makara ... ..	5	17	Capricornus ... ..	2	6 48
Kumbha ... ..	4	43	Aquarius ... ..	1	53 12
Mina ... ..	4	19	Pisces ... ..	1	43 36

From this table it appears that all the *rāsi* are not of equal size, consequently some take a longer time than others in passing through the horizon.

Of the twelve *rāsi*, that called *Siṅha*, "Leo" is appropriated to the Sun, and the one next before it, called *Karkatāka* "Cancer," is given to the Moon; the rest of the *rāsi* are appropriated to the five ancient planets in the order of their position with regard to the Sun. Thus, *Mithuna* and *Kanyā*, the *rāsi* or "signs" bordering on each side of the mansions of the Sun and Moon, belong to Mercury. The two beyond these on each side, namely *Wṛiṣhubha* and *Tulā*, are appropriated to Venus; the two beyond these namely *Mēsha* and *Wṛiṣchika*, belong to Mars. The next two, *Mina* and *Dhanu*, are the mansions of Jupiter, and the remaining two, *Makara* and *Kumbha*, belong to Saturn.

The Sun, the Moon, and the Planets, move through these *rāsi* in their courses.

*Awurudda* "year," is the time during which the sun travels through all the twelve *rāsi* in his course, beginning from the first point of *Mēsha rāsiya*. Sixty years make a cycle. The number of the cycle of any given year is found by adding 11 to the given year of *Saka* (which is 78 years less than the Christian era) and dividing the sum by 60. The remainder, after this process, is the number of the cycle of the given year; and if nothing remains, 60 is the cycle.

The Sinhalese have four eras by which they date the year of any event. That which is most familiar to the generality of the people is the *Śaka Warsha*, which is the year of some

King of the continent of Asia, whose name was Śaka, and who was said to be the head of the royal race of Yawana (Grecian). The present year (A.D. 1855) is the 1777th of the *Śaka Warsha*, 78 years later than the Christian era.

They use the year of our Lord Jesus Christ in all the public documents at present; and the inhabitants of the towns and their neighbourhood are more familiar with this than *Śaka Warsha*.

For religious purposes they use *Buddha Warsha*, the year from the death of Gautama Buddha, 621 years before *Śaka Warsha*. Consequently, the present is the 2398th year of *Buddha Warsha*.

In most of the Medical, Astronomical, and other Scientific works of very ancient dates, which we have in Sanskrit from the Védas of the Brahmins, another era, called *Kaliyuga Warsha*, is used. *Kaliyuga* is the last of the four *yugas* or ages of the world, which, the Siṅhalese say, have passed. The commencement of the *Kaliyuga* was 3179 years prior to *Śaka Warsha*. The present year of the *Kaliyuga* is the 4956th. The whole period during which it is to exist is 432,000 years. The *yuga* or age that preceded *Kaliyuga* was called *Dwāpara*, and existed twice as many years as the *Kaliyuga*, namely 864,000. The one before that was *Trétā*, which existed 1,296,000 years being three times as many as the years of *Kaliyuga*. And the one preceding this was *Kṛita*, the duration of which was four times that of *Kaliyuga*, namely 1,728,000 years. Before these four *yugas*, the present *kalpa* or the period of the world, is believed to have existed during 27 divine *yugas* of an innumerable number of years.

The length of a year is 365 *dawas*, 15 *ṛayas*, 31 *wināḍi*, and 15 *tatparas*. The commencement of the Siṅhalese year falls generally about the 11th of April. To find the exact moment at which any given year commences, or the moment at which the sun enters into *Mēsha rāsiya*, the following is the rule. Subtract 1244 from the Śaka era, and by the remainder multiply 365 *d.* 15 *p.* 31 *w.* 15 *tat.*; and to the product add 1615536 *dawas*

59 p. 45 w. 30 tat.; and then throw off as many 7 days as possible from the sum. The commencement of the year or the sun's entering into *Mēsha rasiya* is so many days after Friday, as appears in the remainder of *dawas*, *peyas*, *wināḍi*, and *tat-paras*. If there is no remainder in the place of days, the commencement of the year is on Friday; if one, on Saturday, and so forth. Thus, to find the commencement of the present Singhalese year, the year of Śaka 1777 (A. D. 1855), subtract 1244 from 1777 which leaves a remainder 533, by this multiply 365 d. 15 p. 31 w. 15 tat., which gives a product of 19682 *dawas* 52 p. 36 w. 15 tat.; then add to this product 1615536 *dawas*, 59 p. 45 w. 30 tat., which will give a sum of 1810219 *dawas*, 52 p. 21 w. 45 tat.; after this, throw off as many seven days as possible, when there will be a remainder of 5 d. 52 p. 21 w. 45 tat. The commencement of the year is thus 5 days after Friday, namely, on Wednesday, at 52 *peyas* and 21 w. 45 tat.: which, according to English calculation, is Thursday 2 h. 56' 42" A.M., or 3 minutes and 18 seconds before 3 A.M.

*Māsé* "month," is about the twelfth part of a year, and is of two kinds, the solar and lunar. The solar month is the time during which the sun continues in any one of the twelve *rāsi*.

The moment at which the sun enters into any one of the twelve *rāsi* is found by the following rule:—to the *dawas* *peyas* and *wināḍi* of the sun's entering into *Mēsha rasiya*, add the number of *dawas*, *peyas* and *wināḍi* opposite to the required *rāsi* in the table below, and leave off, if possible, seven from the number of days, and the remainder is the *dawasa*, *peya* and *wināḍiya* after Friday, when the Sun enters that *rāsiya*.

			D.	P.	W.
Ṛishabha	...	...	2	55	32
Mithuna	...	...	6	19	44
Karkāṭaka	...	...	2	56	22
Singha	...	...	6	24	34
Kanyā	...	...	2	26	44
Tulā	...	...	4	54	6

			D.	P.	W.
Wṛiṣchika	...	...	6	48	13
Dhanu	...	...	1	18	37
Makara	...	...	2	39	30
Kumbha	...	...	4	6	37
Mína	...	...	5	55	10
Mésa	...	...	1	15	31

Thus, to find the time at which the sun enters *Mithuna rásiya* in the present year, add

D.	P.	W.	
2	52	22*	Sun's entering into <i>Mésa rásiya</i>
6	19	44	as found opposite <i>Mithuna rásiya</i>
<hr/>			
9	12	6	
7	0	0	

2 12 6 That is, on Sunday at 12 p. 6 w.

According to English calculation, 10 h. 50' 24" A.M.

The length of each of the twelve solar months, or the time during which the sun continues in any one of the *rási*, is given in the following table.

			D.	P.	W.
Mésa	...	...	30	55	32
Wṛiṣhabha	...	...	31	24	12
Mithuna	...	...	31	36	38
Karkaṭaka	...	...	31	28	12
Siṅha	...	...	31	2	10
Kanyá...	...	...	30	27	22
Tulá	...	...	29	54	7
Wṛiṣchika	...	...	29	30	24
Dhanu	...	...	29	29	53
Makara	...	...	29	18	7
Kumbha	...	...	29	48	33
Mína	...	...	30	20	21
<hr/>					
Total...			365	15	31

\* In leaving out the *tatparas*, if there are 30 or more, one is added to the *winádies*.

From this table it appears, that the sun does not pass through every *rāsiya* in an equal length of time; he sojourns the longest time in *Mithuna*, being 31 *d.* 36 *p.* 38 *w.* From thence he continues less and less in every successive *rāsiya*, until he comes to *Makara*, where he passes only 29 *d.* 18 *p.* 7 *w.* From *Makara*, again, the time of the sun's sojourn in each *rāsiya* successively becomes longer and longer, till he comes up to *Mithuna* again. The difference of the sun's longest and shortest sojourn in these two *rāsi* is 2 *d.* 18 *p.* 31 *w.*

The longest day here is said to be 31 *p.* 22 *w.*, and the shortest 28 *p.* 38 *w.*, or according to English reckoning, the longest day is 12 hours and 31 minutes, and the shortest day is 11 hours and 29 minutes. In order to find the gradual change of the different length of day and night, the following table is given:—

			P.	W.
Mésa	...	...	30	0
Wṛishabha	...	...	30	38
Mithuna	...	...	31	10
Karkāṭaka	...	...	31	22
Siṅgha	...	...	31	10
Kanyā	...	...	30	38
Tulā	...	...	30	0
Wṛiṣchika	...	...	29	22
Dhanu	...	...	28	50
Makara	...	...	28	38
Kumbha	...	...	28	50
Mīna	...	...	29	22

In this table, the length of the day at the time of the sun's entering into each of the 12 *rāsi* is given; the difference between this and 60 *peyas* being the length of the night. The length of the day or night in any day intervening between any two days given in the table is more or less in proportion. This table is, however, constructed upon the principle that the sun always sets first at the point in the *rāsi-chakra* "zodiac" opposite to his position when he rises in the eastern horizon.

But as the sun progresses about one-sixtieth part of a *rāsiya* from the time of his rising to that of his setting, and as the seventh *rāsiya*, by which he always sets, is never equal in size to that by which he rises, there is always a difference of about 5 *winddi*: consequently, the length of day or night given in the table occurs always about 20 days previous to that given in it.

The six months from the Sun's entering into *Karkātaka* is termed *Dakṣiṇī-ayana* "Southern course," and the other six months from his entering into *Makara*, is called *Uttara-ayana* "Northern course," because during these months the sun seems to travel towards these directions.

This declination of the sun is said to cause the general length of a man's shadow (in the central parts of this Island,) cast on the ground at noon for each one-third of the solar month, to be the following number of feet;—viz.:

MONTH.	NO. OF FT.	MONTH.	NO. OF FT.
Mésa ...	1½ 1 1½	Tulá ...	2½ 3 3½
Wṛishabha ...	1½ 2 2½	Wṛiṣchika ...	3½ 4 4½
Mithuna ...	2½ 3 2½	Dhanu ...	4½ 4½ 4½
Karkātaka ...	2½ 2 1½	Makara ...	4½ 4 3½
Siṅha ...	1½ 1 1½	Kumbha ...	3½ 3 2½
Kanyá ...	1½ 2 2½	Mína ...	2½ 2 1½

This portion of the shadow of a man is called *awachchāwa*, or more properly, *awachchhāyāwa*, "extra shadow." Thus, the *awachchāwa* for the first 10 days of the sun's stay in *Mésa*, or the 10 days after the 11th of April, is one foot and a half; for the next 10 days of the same month, it is one foot, and for the third 10 days it is one and a half. And for the first 10 days of the solar month of *Wṛishabha*, the "extra shadow" of a man is one foot and a half; for the next 10 days it is two feet, and for the last 10 days it is two and a half feet; and so on.

• In consequence of there existing little or no difference in the aspect of the country at various seasons, the Sinhalese do not recognise the four seasons of the year, as people of other countries do. The medical and astrological books, speak,

indeed, of six seasons of the year, called *ritu*, and the religious books make mention of three *ritus*: but they are of no consequence here, as people do not talk of them on ordinary occasions.

The lunar month is the period from the moon's passing between the sun and earth until she comes again between these two bodies. The names of the twelve lunar months beginning from that in which the sun comes to *Mésa*, are as follows:

Solar Month.	Lunar Month.	Corresponding English Month.
Mésa	Bak	April and May
Wṛishaba	Wesak	May and June
Mithuna	Poson	June and July
Kaṭaka or Karkaṭaka	Ḫsaḷa	July and August
Siḡha	Nikiṇi	August and Sept.
Kanyá	Binara	Sept. and Oct.
Tulá	Wap	Oct. and Nov.
Wṛiṣchika	Il	Nov. and Decr.
Dhanu	Uṇduwap	Dec. and Jan.
Makara	Durutu	Jan. and Feb.
Kumbha	Nawam	Feb. and March
Mina	Mḁdin	March and April

The lunar month does not necessarily begin on the same day as the solar. It begins with the day after the new moon. That lunar month in which the sun enters *Mésa rásiya*, or that of which the full moon is nearest to the sun's entering *Mésa rásiya*, is the first lunar month, *Bak masa*.

When there are thirteen full moons in any year, the additional month is called *Adhika mase*, two of the months being called by the same name.

About *Adhika mase* there is at present a controversy, in which every one of the Buddhist priests of the Island is more or less engaged. It was originated about 35 years ago, by Atthadassi Terunnánse of Bentota, who is considered to be the most learned of the Buddhist priests of the day. One party



maintain that the *Adhika māse*, or the additional month, ought to be in that solar month in which the two full moons occur, but the other party say, that the additional month must be next to *Ēsaḷa*, and ought to be called the second *Ēsaḷa*, without any regard to the solar month in which the two full moons occur.

The lunar month is divided into two portions, each called *pakshaya*. One, from the day after the new moon to the day of full moon, is called *pura*, "increase;" or *pūruwa pakshaya*, "the former part;" or *śukla-pakshaya*, "white part;" and the other, from the day after the full moon to the day of new moon, is called *awa*, "wane," or *apara-pakshaya*, "the latter part," or *kṛishna-pakshaya*, "the black part." Each *pakshaya*, is divided into 15 *tithi*. The length of a *tithi* varies from 53 to 67 *peyas*.

The names of the fifteen *tithi* from the first, are Pēlawiya, Diyawaka, Tiyawaka, Jalawaka, Wiśēniya, Sēṭawaka, Satawaka, Aṭawaka, Nawawaka, Dasawaka, Ekoloswaka, Doḷoswaka, Te'eswaka, Tuduswaka and Pasaḷoswaka or Amāwaka. Of these two names for the last *tithi*, Pasaḷoswaka is the full moon, and Amāwaka, the new moon.

The moon's path in the firmament is divided into 27 portions, each called a *nekata*, "asterism." Each *nekata* is four-ninths of a *rāsiya*. The names of the 27 *nekata*, beginning from the first point of *Mēsha rāsiya*, are Aṣwida, Berāṇa, Kēti, Rehēṇa, Muwasirisa, Ada, Punāwasa, Pusha, Aśāliśa, Mā, Puwapal, Uttarapal, Hata, Sita, Sā, Wiśā, Anura, Deṭa, Mula, Puwasala, Uttarasaḷa, Suwana, Denāṭa, Siyāwasa, Puwapuṭupa, Uttarapuṭupā and Réwatiya. The *tithi* and *nekata* of any day or time are those in which the moon is in her course through the zodiac in that day or time. The time of the moon's passing through each *nekata* varies from 53 to 67 *peyas*.

The popular notion of the moon's rising or setting *peya* respectively at day and night of *pura* and *awa*, and *vice versa*, is twice the number of *tithi*. So that on the day of Pēlawiya

in *pura*, or the first day of the moon, she rises in the second *peya* after it is day, and sets in the second *peya* after it is night, in proportion to what is past out of the *tithi*. On *Diyawaka* of the *pura*, or on the second day of the moon, she rises in the 4th *p.* after it is day, and sets in the 4th *p.* after it is night. On *Julawaka* of *awa*, or the 4th day of the wane, the moon rises at the 8th *p.* after it is night, and sets in the 8th *p.* after it is day, and so forth. It should be noticed, that in general one *tithi* and *nekata* exhibit in one part of the day, and another *tithi* and *nekata* in the next part of the day; and so proportionably the rising and setting of the moon are changed. Although the above is the popular notion of the moon's rising and setting time, its exact moment is known accurately by the position of the moon in the *rāsiya* through which she passes, by a reference to the *nekata* of the day in a common *lita*, or almanac.

Each of the four quarter days of the moon is called *póya*; the full moon is called *Pasaḷoswaka póya*, and the new moon *Másé póya*. The first quarter is called *Másé giya atawaka póya*, and the last quarter *Puḥaḷoswaka giya atawaka póya*. In the *póya*, or quarter days, the Buddhists generally refrain from worldly occupations, and engage themselves in religious works, believing, on the authority of Buddha, that on these days the messengers of the god Śakra or Indra come to the human world, observe the deeds of the people, record each man's actions distinctly in a book, and then carry it to report to their master.

The Singhalese use different modes of computing time or finding the *peya* of the day. The most common way, when the sun or moon is visible, is by the shadow of a person cast on a level ground measured with his own foot. The method of doing it is thus. Leave off the *awachchāwa* "the extra shadow" as above mentioned, according to the time of the solar month, then double the remaining number of feet and add 12 more; and make this sum a divisor, and 180 its dividend. The quotient is the number of *peyas* either from the

sun-rise, or to the sun-set, as the case may be. If there be any remainder after the above division, multiply it by 60, and divide the product by the same divisor for *winādi*, and so for *tatparas*. Thus on the fifteenth day of April, in the morning, if I see my shadow to be 20 of my feet, I proceed thus to find the *peya*. It being only about two days after the Sun's entering into *Mēsha rāṣiya*, the *awachchāwa* is  $1\frac{1}{2}$  ft., which I take off, and the remainder,  $18\frac{1}{2}$  ft., I multiply by two, which gives 37, I add to this 12, and the sum left is 49. I then divide 180 by 49, thus:

$$49) 180 \text{ (3 } p.$$

$$147$$

---


$$33$$

$$60$$

---


$$49) 1980 \text{ (40 } w.$$

$$196$$

---


$$20$$

$$60$$

---


$$49) 1200 \text{ (24 } tat.$$

$$98$$

---


$$220$$

$$196$$

---


$$24$$

and find that the time is 3 p. 40 w. 24 tat., in the morning, or, according to the English way, 28' 10" after 7 A.M.

A more simple way than this, though not so correct, is that after taking away the *awachchāwa* "the extra shadow," the following numbers of feet stand for each *peya*, either from the sun-rise, or to sun-set, as the case may be, namely 84, 49, 24, 16, 12, 9, 7, 5, 4, 3, 2,  $1\frac{1}{2}$ , 1,  $\frac{1}{2}$ , 0. Thus in the former case  $8\frac{1}{2}$  ft. after the *awachchāwa* has been taken away, being between 24 and 16, is between 3 and 4 *peyas* from sun-rise.

To reckon the time when the sun or moon is not visible, they have a cup called *pē-ḷēḷiya*, made of some kind of metal, or coconut shell, with a small hole in the centre, which will fill in just in one *pēya* when placed in a vessel of still water.

The Singhalese speak of the time of the day in a different mode from what the English do. They do not say, "It is three o'clock," or three on the clock. This mode of expression must be of a comparatively recent date, as clocks and watches were not in use at a very remote period. There is an unidiomatic and corrupt way of speaking of time, among the Singhalese, in the neighbourhood of towns, inhabited by Europeans and their descendants; such as, "*Deṇ kiyada? Pahayi*," "How many is it now? Five" Meaning, "What is the hour now? Five" This mode of conversation concerning time is unintelligible among the Singhalese people of the villages, who have less intercourse with Europeans and speak the language in its purity. Their question, in the place of "What o'clock is it now?" is thus;—" *Deṇ eliweṇḍa* (or *eliwelā*) or *réweṇḍa* (or *réwelā*) *kī peyada?*" "How many *pēyas* is it now to be morning? (or since morning,) or to be night, (or since night)?" Sometimes, speaking with respect to the feet of the shadow of the Sun or Moon, they say: "*Deṇ ira* (or *handa*) *mudunaṭa eṇḍa* (or *hevilā*) *doḷos piyawarayi*."—"It is twelve feet the sun (or moon) to come to the top (or having turned.)"

---

## REMARKS ON THE SUPPOSED IDENTITY BETWEEN NÁGASÉNA AND NÁGÁRJUNA.

BY JAMES DE ALWIS, ESQ., ASSISTANT SECRETARY.

---

ORIENTAL scholars have long entertained the belief,\* that Nágaséna, the hero of "Milindappaṇṇa," and Nágárajuna, the character who holds a distinguished place in the "Rāja Taraṅgiṇī," were identical. Curiosity, however, led me to read the original passage on the Kashmirian history, and the discordance in the rhythm of several lines, to examine it closely. In the course of that examination, I have detected several grave errors in the construction put upon the passage in question, which I beg now to record, with the object of awakening the attention of Oriental scholars, who are better qualified than myself, to the investigation of a subject, which is not only interesting but difficult.

The passage in question, which I extract from the Asiatic Researches, Vol. XV., p. 111, is the following:—

Té turushkaṇvayōdbhūta ; pi punnyaśraya nripāḥ  
 Śushkakṣētrādi dēśēshu ; mātṛa chaittyādi chakkrirē.  
 Prājjiyē rājyākṣaṇē tēśhān ; prāyaKāśmīra maṇḍalan  
 Bhōjjya māstēsa bauddhānān ; pravrajyōrjita tējasan.  
 Tatō bhagavataḥ Śākya ; Siṇhasya puranirvritē  
 Asmin saha lōka dhātaw ; ārdḍhan varsha satan hyagat.  
 Bōdhisatvascha dēśesmin ; nēka bhūmiṣvarō bhūt  
 Sacha Nágār'junah srimān ; shadarhatva nasaṇarāyī.

---

\* See Bombay Asiatic Society's Journal, No VIII. October 1844, p. 96.

Professor H. H. Wilson, in Appendix VII. to his Essay on the Hindu History of Cashmir, thus translates the passage which I have above extracted:

" They (Hushka &c.,) of *Turushka* descent, were princes, asylums of virtue; and they founded colleges and planted sacred trees, on *Suscha* and other places. During the period of their reign, the whole of Cashmir was the enjoyment of Buddhas eminent for austerity. After them, when 150 years had elapsed from the emancipation of the Lord *Sākyā Sīgha* in this essence of the world, a *Bodhisatwa* in this country, named *Nāgārjuna*, was *Bhumisvara*. (Lord of the earth,) and he was the asylum of the six *Arhatwas*."

The Hon'ble Mr. Turnour, with that zeal in the cause of oriental research, for which he was eminently distinguished, and with a view to identify *Nāgārjuna* with *Nāgāsēna*, and to adjust the date here given to that assigned to the latter in Buddhistical annals, has\* corrected the text in two most important particulars: 1st, by prefixing *da* to *sardhan varsha satan*, "one hundred and fifty years," and converting the passage into *dasardhan varsha satan*, "half-a-thousand years;" and 2ndly, by giving to the concluding portion of the Sanskrit quotation, which Professor Wilson has rendered "He was the asylum of the six *Arahatwas*," a negative signification—conveying that he did *not* recognize (*i. e.* he *denounced*) the six *Arahatwas*; and by identifying them with the six *Tīrtakas* mentioned in the "*Milindapprasna*." The entire translation which Mr. Turnour has offered, runs thus:

" They (Hush's, Jushka, Canishka) of *Purushka* descent were princes, asylums of virtue, who founded colleges and cheriyas in *Suscha* and other countries. During the entire period of their rule, the whole of *Cashmir* was under the spiritual controul of ascetic sages, eminent for their rigid piety. Thereafter, when (half a thousand) five hundred years, had elapsed in this (land) as well as the whole world, from the period that the sanctified *Sākya Sīgha* attained *Parinirupitti*, the pre-eminently endowed *Bōdhisatwa Nāgārjuna*, became the (spiritual) Lord of this (and many other lands, and did *not* recognize (*i. e.* *denounced*) the six *Arhatwas* (who were his contemporaries)."

---

\* See Bengal Asiatic Society's Journal for 1836, p. 580.

Before remarking on the important alterations thus effected by Mr. Turnour, it may be necessary to examine the original text, and to notice the fact, that it is written in that most frequent and useful form of Sanskrit verse called the *Anushtubh*—a metre “in which the great body of metrical composition, whether narrative or didactic, exists”—a metre too, in which “the laws of Manu, the Mahābhārata, the Rāmāyaṇa and the Purāṇas are written.” The species under notice is thus defined:—

“The *Anushtubh* stanza is divided into four *pādas* of eight syllables each. In its most regular form, the first foot is any one except a tribrach, the second may be a dactyl, a tribrach, cretic or anapæst; the other two syllables are indifferently long or short.”

Another peculiarity in the formation of the *Anushtubh* is, “that the fifth syllable of each line is short, the sixth long and the seventh alternately long and short; whilst the first four syllables and the eighth are arbitrary.”

By reducing the passage in question into symbolical figures, it will be perceived at a glance, that there are three prosodial errors;—one in the 2nd line; another in the 11th; and a third in the 14th; whilst the 12th line, in which it is stated that *da* is omitted before *sārdhan*, and the 16th, which is said to contain a denunciation of the six Arhatwas, are clearly free from prosodial errors. Two of the errors which I have noticed are of a trifling character, as they may easily be rectified without adding anything to the sense. The letter *a* in *api* “afterwards,” with which the 2nd line of this passage commences, is omitted; when added, the line runs thus:—

*Api punnyāsrayaṇa nripaḥ* : — — ○ — — — — ○ = 8.

The 14th line is thus correctly rendered in the Nāgari version of the “Rāja Taraṅgiṇī” printed at Calcutta in 1835; and I at once adopt it, as it is free from error.

*Neka bhūmiśwaro bhavat* : — — — — — — — — — — ○ = 8.

In the 11th line there is an unaccountable confusion, both in

the Nāgari version, and in the extract published by Professor Wilson; and I confess that it is impossible, without materially altering the sense, to redeem it from the palpable inaccuracy of rendering the 5th a *long*, and the 6th a *short* syllable.

Armin saha loka dhāṭaw: ( ) ( ) — — ( ) — ( ) ( ) = 8.

I have thus examined the entire passage in reference to the rhythm. It therefore only remains to consider the correctness or otherwise of the criticisms offered by Mr. Turnour.

With regard to the 12th line—if, as stated by Mr. Turnour, a *d* with its inherent vowel is introduced, and the whole line is thereby rendered *dasṛdhan varsha satan hyagāt*; it will be perceived that we not only destroy the harmony of the entire verse, but render the line 9, instead of,—as it is, and ought to be—8 syllables.

Sārdhan vareha satan hyagāt: ( ) ( ) ( ) — — ( ) — ( ) = 8.

As to the last line,—*śkadarhatva na-sanshrayi*; it is stated that Professor Wilson has lost sight of the negative *na*. Mr. Turnour can scarcely be deemed correct in offering this criticism; and on reference to the text we also find that Professor Wilson has incorrectly *extracted* the passage. It should be (see original) *Shaḍahar vana saṅṣrayi*, which means, “he was one who spent six-days in the wilderness.” To render the passage as Mr. Turnour has translated it, “he denounced the six Arahats” the word *arhatva* should be either *arhatwan*, the accusative, or *arhatwasya*, the genitive.

The passage given in the Nāgari original furnishes no great objection in point of grammar—certainly none in regard to rhythm; and is altogether such as may be reconciled with the doctrine of *Nirōdha Samāpatti* in Buddhism, by which it was incumbent on the ascetic, who had attained the state of “Arahat” to spend six days in seclusion in the wilderness, and on the seventh to leave it in search of food.

Seeing, therefore, that the two most important coincidences between the Kashmirian and Buddhistical annals to which Mr. Turnour refers, do not really exist, it may be inferred, that his



other reasons for the identity of Nágárijuna and Nágaséna, founded especially, as they are—on “hypothetical reasoning,” lose much of the weight due to them, if they do not altogether fall to the ground.

I shall, however, postpone a consideration of them to an early opportunity, contenting myself at present with a translation of the passage in question, which I append:—

“It is said that they (Hushka, Jushka, Kanishka) of Turushka descent, were princes, who were embued with the virtue of merit,\* and who afterwards founded Colleges, chétiyas, &c., in Sushkaléttra† and other countries. During the period of their extended reigns‡ the country of Kashmir was greatly under the spiritual control of Buddhistical ascetics, pre-eminent for their rigid piety. Thereafter, when a century (one hundred years) and a half had elapsed in the essence of this world, after the sanctified Sákya Siṅha obtained final emancipation (*Puranirwritte*)§, there appeared in this country a Bodhisat (*anéka bhumishwara*) lord of many lands. This distinguished personage, who was named Nágárijuna, usually spent six days (in the week) in the wilderness.”||

\* “Embued with the virtue of merit” means that they betook themselves to a course of religious austerities, by which sin was avoided, and attained a status for acquiring merit.

† *Sushkaléttrádi*. I have translated *Sushkaléttra*, &c. This is the form in which the word occurs in the Nágari version. It may be either one name or two. And this expression, rendered *Shushkakshétrádi* by Professor Wilson, may also stand for one or two names. It may either stand entirely as a name, or be rendered “the valley (*Kshettra*) of Sushka, &c.”

‡ “Extended reigns.” The word *prájiyá* rendered by me “extended,” is interpreted by Mr. Turnour to mean “entire,” and it is omitted in the translation of Professor Wilson. It is, however, remarkable that this word is ill-adapted in its present position as an adjective to qualify *Rájjyakshané*.

§ *Puranirwritte*. This is undoubtedly *Paranervitta*; and Professor Wilson's alteration was as indispensable as correct.

|| *Shadahor vana sanshrayé* is rendered in Professor Wilson's extract, *Shodarhatwo nasanshraye*. See my remarks in the Text.

AN INTRODUCTORY PAPER  
ON THE INVESTIGATION OF SINGHALESE MUSIC.

BY LOUIS NELL, ESQ.

---

THE Ceylon Branch of the Asiatic Society, formed to institute and promote enquiries into the Arts of Ceylon, together with the social condition of the present and former inhabitants of this Island, would embrace within the scope of those enquiries, the investigation of Singhalese music,—since it is peculiar to the Singhalese, and because it is calculated to throw some light upon the social condition of the people. Their Music is as peculiar to the Singhalese, as the music of any other people, to them. The Oriental enjoys his rude melodies, as heartily as the European, the music of the West. But the difference is so great between the barbarous and the civilized art, that the former becomes a subject of curiosity to the votary of the other. Though Singhalese music, therefore, may be of no great intrinsic value, it is deserving of investigation as a national art, and as an illustration of the social condition of the Singhalese people. It is hardly necessary to illustrate this position, by alluding to the marked characteristics of Scottish and Irish music; or by contrasting their national character with that of the music of Italy. Nor will it be necessary, to make more than a passing allusion, to the effects of musical culture in Germany, in the Tyrol, and in Switzerland. It will not be denied, that the influence of music is calculated to take hold of the affections: nor will its moral influence be denied when the value which has been placed on it by religion, is but for a moment considered. The investigation of Singhalese music, therefore, is worthy of the attention of this Society.

With regard to the estimation, in which music was held, in comparison with other branches of knowledge, it may be, observed;—That the “Rāja Ratnākara,” ascribes to a favorite Sīghalese prince, a knowledge of the following branches of Eastern Science;—1 Oratory; 2 General knowledge; 3 Grammar; 4 Poetry; 5 Knowledge of Languages; 6 Astronomy; 7 Knowledge of giving counsel; 8 Of obtaining *Nirvāna*; 9 The knowledge of good and evil actions; 10 Of shooting; 11 Of Elephants; 12 Discernment of thoughts; 13 Discernment of invisible beings; 14 Knowledge of words; 15 Knowledge of history; 16 Of the law; 17 Rhetoric; and 18 Medicine. (*Upham II., 99-100.*)

It is probable, that had music been held in higher estimation by the partial historian, he would have added it to the others, by which the memory of Parākrama Bāhu the 3rd, is adorned in the page of Sīghalese history.

It is probable that many attempts have been made to reduce Sīghalese melodies to European notation; but the silence which has been hitherto preserved on the subject, must be interpreted as a tacit acknowledgement of failure. The fullest account of native music and musical instruments, is that given by Davy, whose work on Ceylon ranks next to that of Knox for originality and correctness. Davy gives a description of seven native musical instruments,—1 *beragediya*, 2 *dawula*, 3 tom-tom, 4 *uḍekkiya*, 5 *talliya*, 6 *horanēwa*, and 7 *v'ṇḍva*. It may be here remarked, that all these are Sīghalese instruments; and that the brother of Sir Humphry Davy, with the carefulness of a scientific enquirer, has not confounded them with Malabar instruments, or added any foreign ones to his enumeration. It would be unadvisable perhaps, to incorporate the remarks of Dr. Davy, in this paper, since the work itself could always be referred to.

My succeeding remarks will be of a more practical nature, as they were suggested by actual experiments; the results which, however, have not been extensive enough to justify

tion.

It will follow from observations already made, that no such results have been arrived at by writers on Ceylon, as were obtained by Lane, in his "Modern Egyptians." He gives a few instances, in European notation, of Egyptian airs, including the "call to prayer" at Cairo, the style of chanting the Korán, and some specimens of secular songs. In attempting such results in Ceylon, the very first difficulty would be, the unsuitableness of the European musical scale to express the exact nature of the sounds, which form the strains of native melodies. This is, perhaps, not generally known. To explain the reason would involve a consideration of the leading principle of musical acoustics, and of the theory of the musical scale. But before doing so, a favourite speculation must be dismissed. It is a favourite method on such enquiries as the present, to speculate on the probable character of Hebrew, ancient Egyptian, and Grecian music. This course, though seemingly going to the root of the matter, will give no practical results. I believe I am not incorrect in stating, that all certainty in the history of music dates from the discovery of our modern notation. This may be described, as, the system of designating musical sounds by points, distributed on lines and the spaces between them; which system, when once acquired by a musician, enables him to read melody and harmony, and to reproduce exactly what has thus been written. This definition, I believe, will at once exclude any ancient Eastern notation, as well as the system of using prosodial feet.

The application of the principles of musical-acoustics to this investigation, may be illustrated as follows. We shall take the instance of a person, endowed with a correct ear, and possessing a moderate degree of skill in performing on the German-flute. We shall, also, suppose him to listen, with curiosity, to the performance of a native musician; and to endeavour to catch the air being played, on his own instrument. To any one, who has tried the experiment, it is needless to foretell its failure. Let us suppose our amateur, to ask himself the reason, why? The easiest solution of the difficulty

will be found in a comparison of the two instruments. Not in the finish and perfection of the one, and the native rudeness of the other; but in the acoustical proportions of both. He will find, to his surprise, that the vents of his own instrument are apparently placed in the most arbitrary manner, with regard to their relative positions; while on the other hand, the despised native instrument is vented with more mathematical regularity. In seeking a scientific explanation, we should begin from the most elementary principles.

Musical tones are supposed to be the results of ærial vibrations, proceeding from a central vibrating body. Under the influence of the same motive force, the relative number of vibrations has been found, to be in the inverse ratio of the dimensions of the vibrating body. Thus, in the case already considered, the relative number of vibrations (producing the different notes) is in inverse ratio to the length of the column of air in the flute. The average diameter of the flute throughout its length being supposed to represent an uniform diameter, and beginning by closing all the vents, as each successive vent is opened, the length of the column of air in the flute tube is reduced in the same proportion. Sounding the instrument with the same force, it will be found, that the shorter the column the more acute is the note. And, as already stated, the vents being placed at irregular distances, the musical sounds produced, are at irregular intervals from each other. But the native instrument, having its vents bored at regular distances, will emit notes at regular intervals of acuteness. The reason why the sounds of the latter are so unpleasant to our ears, will appear, when we consider the theory of the musical scale.

Taking the natural scale of C major, we find, that it consists of seven unqualified notes, designated by the seven first letters of the alphabet, in the following order, C, D, E, F, G, A, and B. The intervals or musical distances between these notes are not equal, since those expressed as  $\frac{C}{D}$ ,  $\frac{D}{E}$ ,  $\frac{F}{G}$ ,  $\frac{G}{A}$ , and  $\frac{A}{B}$ , are known as tones; while those expressed as  $\frac{E}{F}$  and  $\frac{B}{C}$  are

half tones. On examining the German-flute, the vents will be found to bear a corresponding relation to each other. Besides this peculiarity, it has been found, that the scale of seven notes, possesses another inequality. Dividing the scale into two tetrachords, expressed as C. D. E. F. and G. A. B. C.—it is asserted, that there is not a strict mathematical equality between the two divisions. Though all assume this equality for practical purposes, there seems to be reason to suppose, that in this want of symmetry is hidden a key to the difficulty of tuning compound instruments like the organ and the piano-forte. And I further beg to remark, that the necessity for what are called “the golden rules” of harmony, has probably arisen from the difference, thus established by nature. There is no doubt, that the scale of intervals, as above described, is pleasing to an European ear. When it is considered, also, that in the course of improvement, the European instrument must have resulted by gradual perfection from its rudest and simplest form,—we should consider it, as the result of endeavours tested by the criterion of a good ear, and assimilated to the standard of existing ideas. The native musician, however, by a timid reliance on mathematical intervals, has established an unnatural scale, to which his ear has been attuned by the force of habit. The European instrument is the creature of science: the native art is the creature of its instrument.

The scales of European and native music, are therefore, essentially different. And the idea which is sometimes entertained, that Singhalese music is in the minor keys, is a libel on the music of the West. European airs, both in the major and minor scales, are vented by the same instrument. Thus, there are intermediate vents for the chromatic semi-tones, introduced in the eight-keyed flute. The notes sounded by these vents may accidentally coincide with those produced on a native instrument; but the acoustic and musical intervals will be found essentially different.

It follows from the preceding considerations, that in investigating Singhalese music, the most perfect native instru-

ments should be obtained, their gamut ascertained ; and, if necessary, a new system of notation adopted, every note of which should have a defined value and relation to the European musical scales. In obtaining instruments, Tamil ones, should not be confounded with Siphalese. Tamil music is I have no hesitation in saying, essentially diatonic in its character. And I could illustrate this by quoting an instance of an air, which I have myself heard sung by Malabars, which has been set to English words, and also incorporated in a set of Quadrilles by the omnivorous Jullien. It is well known, also, that Hindoo airs have not only been written in the European notation, but harmonized; which latter circumstance alone would be a test of unfailing efficacy.

In conclusion, I may indicate the means, by which I consider the investigation proposed, could be carried out by this Society.

1st. By the addition to the Society's Museum of a complete collection of Siphalese instruments, duly authenticated.

2ndly. By the contribution to the Society's Journal, of short accounts of native musical notation.

3rdly. By the reduction to writing, of native melodies, using, if necessary, a peculiar musical scale.

The enquiry should be carried on with scientific curiosity; and the prejudices of the native should not be ridiculed, who delighted with his tom-tom, stops not to enquire the cause of his enjoyment. To him "nothing is so tranquilizing as sweet poetry and the gentle *udekkiya*."

---

## A SYNOPSIS OF THE "SAIVA SITTĀNTAM."

BY M. COOMARASAMY, ESQ., ADVOCATE.

---

OF the various systems of Philosophy in which Hindú literature abounds, one of the most important is *Saiva Sittāntam*. Although the doctrines which it propounds are strictly esoteric, and calculated for the comprehension and enlightenment only of those who have been initiated into its mysteries, yet it is this system which forms the groundwork whereon the huge fabric of Hindú popular theology is based. It thus becomes the fountain head, whence the religious creed of millions of Hindús in India and Ceylon is derived. As such, it is worthy the attention of the public. The subject, however, is too extensive to be dealt with, in all its ramifications, within the limits of this contribution, and this crude attempt will therefore be confined to a rough pencilling out of the most prominent features of this vast panorama of literary and metaphysical grandeur.

It aspires to a divine origin, and assumes the authority of a direct revelation from God, it being asserted that "*Sivan* (God), through his chamberlain *Nanti*, revealed to *Sanatkumáran* in consequence of his high devotion, the system of sacred science, called *Raurava Akamam*." This *Akamam* is the principal authority on this subject, but the matter contained in it has likewise formed the theses of innumerable treatises of extensive learning and research, written by some of the most highly gifted men of genius of both ancient and modern Hindústan. The Tamil *literati* of Southern India have been particularly active in this department of human knowledge; and the results of their labour have been handed down to posterity in works clothed with the best, but the most difficult, strains



of the rich and lofty *Chen* Tamil.\* Amongst these, *Siva Nāna Pōtam*, by *Meykaṇḍa Nāyanār*, *Siva Nāna Sitti*, by *Aruṇanti Nāyanar*; and *Sivappirakāsam* by *Umdpati Asiriyar*, are held in the highest esteem. Our information will be traced chiefly from these sources.

The style of these writings is didactic, and they contain the best examples of Hindú dialectics, which, *en passant*, are considered by some to be at least an expansion of the syllogism of Aristotle, if not the origin thereof. It is no easy task even for the learned amongst the Tamils, to understand fully, and expound clearly and correctly, these elaborate treatises; and it must be confessed, that the effort to reproduce the ideas and sentiments contained in them, in an English garb, and in a manner acceptable and interesting to all, is not less difficult.

---

*Saiva Sittāntam* professes to treat of

I. *Pati* —GOD.

II. *Pasu* —SOUL.

III. *Pāsam*—FETTER, CHAIN.†

An accurate and complete knowledge of the nature and bearings of these three subjects, denominated otherwise, *Tripat-ārttam*, is of essential consequence, in the eyes of Hindú savants, for the attainment of the only true object of this life—the *Mutti*, or heavenly bliss in the other.

God, Soul and *Pāsam* are the three eternal and imperishable entities, whence the universe and all its chequered phenomena have sprung forth into existence, and whereinto all and every one of them will be ultimately resolved.

Attention will be directed to each of them in their order.

---

\* There are two kinds of Tamil—the one, High Tamil, called *Chen* Tamil—the other, Low Tamil, called *Koḍun* Tamil.

† Lit. “fetter” “chain,” that which keeps the soul originally in a state of bondage and ignorance. This will be more fully explained hereafter.

I. *Pati*—GOD.

*Pati* is but one of the many names by which the supreme God is known to the Hindús. He is also called *Piramam*, *Parapiramam*, *Para Sivan*. The last term gives the characteristic name to the School of Indian philosophy under notice.

The existence of such a being, as the Creator of the World, is proved by means of various arguments. One of these happens to be identical with the argument which was first advanced by Socrates, but afterwards fully expounded in Paley's memorable work on Natural Theology. It is comprised in the following stanza from *Siva Nāna Sitti* :—

“As the whole world which is known under the designations of *He*, *She*, and *It*, comes into existence (without having existed previously), exists, and is destroyed, in an *orderly* manner, (it follows) that there is one who is the creator of this world, and who is the beginning and end in himself. His existence is permanent, and he is in the form of a spirit freed from (*Pásam*) evil from eternity.”

This stanza admits also of a construction from which some commentators raise a fresh argument for the necessity of a Creator of the Universe. The reasoning is to the following effect:—

1. The world is not eternal: *consequenter*,
2. It had a commencement and did not exist before such commencement : *ergo*,
3. It could not have created itself; it requires some cause other than itself to bring it into existence.

The nature of God is to the following effect:—

Though God pervades the whole world, yet He is other than the world; for He is spiritual, and the world is material.

As sound and the tune, God and the world. As sound is to the tune, filling all its notes, so God is to the world, pervading all its forms.

As the fruit and the flavour, so God and the world. As flavour pervades all parts of the fruit, so God pervades the world from the first.

He is in intimate union with the Soul, yet He is other than the Soul.

He is eternal, pure, has no equals or superiors.

He has neither qualities, nor names,—is omnipotent; is omniscient; is the source of understanding to innumerable souls; is illimitable in His nature; exists in the shape of *Nānam* (divine wisdom); is the form of happiness; is difficult of access to unstable worshippers, but is easily approached by those who worship in the regular course; and shines as the least of the little and the greatest of the great."

The proof for the existence of a Creator, and the refutation of the tenets of *Lokdyatar*, (the Indian Epicurean philosophers), and of other sects who maintain atheism, and attribute the world to chance, occupy many stanzas teeming with apt illustration and ingenious arguments in *Sitti*.

The next subject in order is

## II. *Pasu*—SOUL.

The existence of a Soul within the human organism, and as different from "mortal coil," is established by what is called *Oḷivu*, "the rule of exception," in Hindú Logic. The argument on this subject is as follows:—

A man says "this thing is mine," "that thing is not mine." Here it is evident that there is a thing owned or not owned, and a man owing or not owing. In the same manner, it is often said "this is my body," "this is my face," "this is my hand." Here it is obvious that there exists something apart from the body—the face and the hand—and owing them: this is the Soul. Again it is usual to say "I thought so," "I did so," "I said so." Here also there exists something other than the thought, the deed, and the saying: this something is the Soul.

There are also other arguments given for the existence of the human soul. These are based chiefly on the phenomena of Death and Sleep. They are to the following effect:—

1. At Death, all animation becomes extinct, through the human frame is left entire; *consequenter*,

2. Animation must be traced to some other source than the human frame.

3. This source is the Human Soul.

As to the nature of the Soul. It is not God, nor an emanation from God, as the Vedāntists hold. It is an individual being: and eternal one, being uncreated and immortal. Souls are not one in essence, as some maintain; but are manifold and imperishable. In their primordial state they are not only unintelligent but even unconscious.

The third head of enquiry is

### III. *Pāsam*—(FETTER, CHAIN.)

This *Pāsam* is that which as it were binds the soul to a state of bondage, unconsciousness and ignorance, in its original state. It is subdivided into three parts. These are,

1 *Aṇava Malam*.

2 *Māyā Malam*.

3 *Kāmiya Malam*.

*Aṇava Malam* is the source of unconsciousness and ignorance to the soul.

*Māyā Malam* is that which operates in the removal of the unconsciouness and ignorance of the soul, by becoming the material basis of the universe and man.

*Kāmiya Malam* is the accumulation of merit and demerit acquired by the souls in their previous states of development in organised forms.

The term *Malam* means rust or dirt: the three *Malam* forming the rust or dirt of the soul in its original state of non-development.

*Pāsam* exists from eternity and is imperishable, except so far as *Māyā Malam* and *Kāmiya Malam* are concerned. When the two latter are removed from the soul, and *Aṇava Malam* loses its strength, then the soul will be liberated from the grasp of *Pāsam*, and be ripe for attaining *Mutti* or heaven.

IV. THE RELATION BETWEEN GOD, SOUL AND *PÁSAM*.

God exists from eternity, alone, by himself, apart from the Soul and *Pásam*. But the two latter are linked in intimate union with each other—*Pásam* enveloping the Soul. This abnormal condition of the Soul is from eternity. It is unaccountable. It is a mystery. Here the Soul lies in a state of bondage, denuded even of thought.—In consequence, it is miserable and unhappy. This relation of *Pásam* to the Soul is analogous to that which subsists between the husk of the paddy and the rice which it envelopes, or between the rusty coating and the copper which it conceals.

This link between the Soul and *Pásam* is not, however, indissoluble. The chain will be severed—the soul will gain its freedom. It will ultimately be drawn away from the grasp of the Archangel of Evil—*Pásam*, and be received into the bosom of the *summum bonum*—God. It will then shine in its true and resplendent glory in the august presence of the King of the Universe—even in mystic union with *Parappiramam*. This is *Mutti*. Here the soul does not lose its individuality, nor is it annihilated. But it exists in *Attuvitam*—unity in duality. This is called *Sáyucchiyam*—the heaven of the Saiva Sittántists, as *Nirwána* is that of the Vétántists and Buddhists.

## V. MAN.

To break through its thralldom the soul had not the power. But God, who is “an Ocean of mercy,” pitied the soul in its distress. He willed that the soul should be freed from the clutches of *Pásam*, and simultaneously with the will, the fiat went forth, that the soul should be developed in human organism, or in other words, that man should be created. In this manner the soul descends to this universe, for it is here that the course lies where the soul is to run its race from the goal of evil—*Pásam*, to the goal of good—God. Creation is not one of the “beautiful plays of God.” It is pregnant with a serious purport. Its object is the deliverance of the soul :

for *Pásam*, before it will relax its hold on the soul, demands satisfaction for the loss it sustains in parting with it. The demand has been met by summoning this world and man into existence. And here, when he shall have “balanced off his demerit by his merit”—his evil deeds by his good deeds—he will then, and then alone, stand in a position fit for liberation.

The development of the soul in the human organism, is, according to this system of philosophy, curious, if not interesting. It views man as a microcosm. All the essential constituents of the bundless universe are coiled up likewise proportionately in puny man. And as God is the King of the Universe, so is the Soul, the king of the miniature universe—man.

Man is said to be composed of ninety-six *Tattuvam*—a word, which like many other technical terms of this school, does not admit of being rendered in English, although the words, “category, principle, power, organ, property,” approximate it in meaning. The order in which the *Tattuvam* are evolved from *Pati* and *Pásam*, their names and their characteristic properties, and the parts which they are intended to play in the human organism, are given with great minuteness in the works above mentioned. But notice will here be taken of only the principal *Tattuvam*.

By the grace of *Pati* there was developed from *Sutta Māyai*—pure elemental matter which was united with deity from eternity—*Nátam*, the male energy of *Pati*: from *Nátam* was evolved *Vintu*, the female energy of *Pati*: from *Vintu*, *Sátakkiyam*, in which both the male and female energies inhere: from *Sátakkiyam*, *Isuran*, the obscuring God: and from him, *Uruttiran*, the destroying God. These divine developments are associated with the soul with a view of prompting it on towards final deliverance.

For the use of these developments, and for the purpose of drawing the soul out from its state of unconciousness, as it exists imbedded in *Pásam*, into a state of intelligence and

activity, there are evolved, from the above mentioned *Vintu*, the four *Vdkku*, which may be translated “organic bases of intelligence.” These are

- 1 *Sukkumai*.
- 2 *Paisanti*.
- 3 *Vaikari*.
- 4 *Mattimai*.

All these were unfolded from pure elemental matter, and by the agency of *Pati*. The productions that follow were drawn out of *Pasam*—impure elemental matter—and by the instrumentality of the divine developments detailed above.

By the grace of *Satdtkkiam*, there are evolved from *Asutta Māyai*, impure elemental matter,

- 1 *Kālam*—Time.
- 2 *Niyati*—Fate.
- 3 *Kalai*—Continency.

*Kālam* attaches to souls the results of past time, the fruit of the present time, and whatever is new in future time. *Niyati* will make sure to souls their respective *Kanmam*, i. e., the due meed for their good and bad deeds. *Kalai* operates to a certain extent in the removal of *Pāsam*.

From *Kalai* are developed,

- 1 *Vittai*—the power of thought; and from *Vittai*,
- 2 *Rākam*—the desire to relish the pleasures of sense, which was necessary to make the souls eat the fruits of merit and demerit.

Again, by the grace of *Uruttiran*, *Pirakiruti* is evolved from *Kalai*. From *Pirakiruti*, which is the material basis of the subsequent productions, spring the *Mukkanam*, the three moral properties, viz.:—

- 1 *Sāttu Vikam*—(lit. “goodness.”) This prompts the soul to divine wisdom; to truth and love.
- 2 *Rasatam*—(lit. “passion.”) Here lie the propensities to pride and selfishness.
- 3 *Tāmatam*—(lit. “darkness”) cause of laziness, stupidity, drowsiness.

The position of the three moral qualities, as they exist undeveloped in *Pirakirutī*, is called *Aviyaktam*. From this is evolved,

- 1 *Sittam*—the thinking principle. From *Sittam*,
- 2 *Putti*—judgment. And from *Putti*,
- 3 *Akaṅkāram*—This is the individualizing principle.

This *Akaṅkāram* is threefold, viz.

- 1 *Taisatha-akaṅkāram*, wherefrom *manam*, (mind) the understanding and the five perceptive organs are evolved.
- 2 *Vaikari-akaṅkāram*, wherefrom “the five organs of action” are evolved. These are the mouth, the feet, the hands, and the excretory organs.
- 3 *Putāti-akaṅkāram*, wherefrom the five rudimental elements are evolved. These are Sound, Touch, Form, Taste, Smell ;—these are called *Tanmāttirai*.

From Sound is evolved ether ; from Touch, air ; from Form, fire ; from Taste, water ; from Smell, earth.

These are the essential items that make up man, and from these above enumerated *Tattuvams*, many other subsidiary ones are developed to make up the 96 *Tattuvams*. This part of the *Saiva Sittāntam* often proves difficult to many, and an incipient Hindú philosopher devotes the first months of his study to an investigation of it.

The intelligent and active state of the soul is called *Sākkiram*, when all the 96 *Tattuvams* are in full vigor and play, and when the soul takes its seat in the forehead between the eyebrows. *Soppanam* is the state when a man is asleep. Here all but twenty-four of the *Tattuvams* are lulled into inactivity, and the soul descends to a seat in the neck. It experiences here only what it had seen in *Sākkiram*. This is the phenomenon of dreams. *Sulutti* is the stage below *Soppanam*. Here the soul exists in the heart in company with only two *Tattuvams*—the will and the vital principle. The soul is incapable of distinguishing any thing here. From this, the soul drops down into the navel, and exists in the state



called *Turiyam*, in union with the vital principle alone. Here it ceases to think. Next below is the *Turiydtitam*, where the soul descends deprived of even the vital principle. This is Death.

The polar star of life is then, according to this Philosophy, the deliverance of the *Pasu* from the *Pásam*. But *Pasu* soon loses sight of this object. The soul once set in motion in the human organism revolves on from life to death—from death to life,—from birth to birth,—from age to age,—ever bounding away from God, and never rebounding towards him; as if it were a planet of the solar system actuated by some chance or other by the centrifugal force alone, without the co-operation of the centripetal force likewise; until its wayward course is arrested and a new direction given to it toward the centre of the orbit—even *Pati*—"the Sun of wisdom." This takes place at last when the soul's merit and demerit (*kanman*) have been cancelled, and there is no residue left to be eaten up at future births. Then there will be a cessation of births, and the soul will be ripe for liberation. The state of a man who has arrived at this phase of existence is called *Tivira Satti nipátam*. It is thus described in *Sivappirakásam* :—"For such a man this world will possess no charm. He will ignore it. He will loathe his own body in the same manner in which the bearers of a worm-eaten corpse will detest it, when, on their way to the burial ground, the worms fall on them. When he finds himself in union with the warring mental faculties within his bosom, he will feel like an elephant in the paw of a lion. When he sees that he is in co-operation with the organs of sense and the organs of action, he will cry out like a frog in a snake's mouth. The way in which he will fear the influence of his family and friends, and leave them, is like that in which one, who has lain down to rest without knowing that there was a snake in his bed, will on awaking and seeing the snake, hasten away with terror; or like that in which a person whose house is on fire, leaves his goods and hastens to escape by some way or other which he sees."

The following stanza, from *Siva Nāna sitti*, gives with great pathos and beauty (which are however lost in a translation) the manner in which God will reclaim the lost soul.

“As a king, whose son had stayed away from him and lived in ignorance of his father amongst the *Vēḍḍs* (wild men), will, on discovering the son, exclaim to him ‘Come to me, oh, thou darling child of mine!’ and make him a participator of the happiness that he (the king) himself enjoys; so even will the Supreme God present himself before the soul when in distress, from being enmeshed in the net of the five *Vītas*—senses, and severing the soul from Pasam, will assimilate it to himself and bless it with his holy feet.”

Such is an imperfect *résumé* of the *Sāiva Sittāntam*. A greater amplification of the subject is reserved for a future contribution, where the intimate connection that subsists between the *Sāiva Sittāntam* and the popular form of religious worship that obtains among the Hindús of the present age, will engage our attention.

---

## TERMS OF ADDRESS AND MODES OF SALUTATION IN USE AMONGST THE SINGHALESE.

BY JAMES ALWIS, ESQ., ASSISTANT SECRETARY.

---

THERE is not perhaps a greater difficulty experienced by Europeans\* in their intercourse with the Natives of this country, than that of correctly applying the forms of salutation and address known amongst them. Often have we suppressed a smile forced upon us, on hearing European authorities address a peon or other servant thus: "*Pion ara pota gen-en̄ta*," "*Mudiyansēta andagahapan*," "*Arachchita kiyāpan*," &c. Frequently, too, have we heard Europeans enquire with indignation, whether certain terms as applied by their Interpreters to witnesses were not insulting or offensive. Not long ago the native portion of an entire Court was much amused on hearing counsel in his address to the Court, apply the term *Walawwa* to indicate the residence of a poor low caste person, his client. The difficulty of acquiring the proper use and application of terms of address, so as on the one hand not to offend, and on the other not to give too much respect, to the person addressed, seems to have been so greatly felt by Mr. Justice Stark, that he has devoted considerable attention to the study of the subject. The interesting information which he acquired, he has embodied in a paper which is found published in the Ceylon Asiatic Society's Journal for 1853. That paper, gives the reader an imperfect account of the numerous forms of salutation and address used by the Singhalese. As

---

\* "No people of the East are more critical as to style, or more fastidious as to terms, than the natives of Ceylon."—Tennent *Christianity in Ceylon*, p. 265.

the topics, however, upon which he has dwelt are very interesting, the writer has in his observations followed the order of the subjects treated therein.

Mr. Justice Stark begins with what he considers "the fundamental terms of address," and gives as such six—*tó*, *tamá*, *tamusé*, *tamunnehé*, *tamunnánsé* and *tamunvanhansé*—with the various degrees of respect or disrespect with which each is associated in the native mind. As pronouns of the second person derived from the root *ta*, they are certainly distinguishable from a variety of others, which are now used as "terms of address;" but in the enumeration of the latter class Mr. Justice Stark has fallen into a few errors. Of these I many here notice seven omissions, which are pronouns of the third person, applied as terms of address in the second person, viz. *උබාභේ umbahé*, *උඹ umba*, *භූබා nuba*, *ඔබ oba*, *ඔබවහන්සේ oba-vahansé*, *භූබවහන්සේ nuba-vahansé* and *මුඛවහන්සේ muba-vahansé* of which the last two only are noticed by Mr. Stark.

It is unnecessary to remark on the above omitted terms, as I have fully treated of them in the *Sidat Sangarāwa*; (pp. 153-168,) but it will be observed, that Mr. Stark is far from being correct when he states that *nuba-vahansé* is the term now employed in lieu of *oba-vahansé*. If he meant, in reference to the Scriptures, of which a new version is being prepared under the auspices of the Bible Society, he was correct; but if otherwise, I need scarcely remark that *oba-vahansé* is the term in universal use amongst the Sinhalese. There is, nevertheless, no objection to the change in the forthcoming version of the Bible, especially in view of the fact, that *භූබවහන්සේ* like *මුඛවහන්සේ* (see *post* extract from *Ratana-waliya*,) is the term frequently found in books.

The term *වහන්සේ vahansé*, though now no longer used, except as an affix, was nevertheless anciently used by itself to convey what an Englishman would express by "your Excellency," "your Majesty," "your Highness," or "your Lordship."

Thus in the *Amāwatura* :—

වහන්සේ මම සැබව පිහිටා සිටිමි වදුර ණුමානවැසිති “Please your Lordship, said he, I will firmly stand by the truth,” &c.

The word *vahansé*, like many other terms of address, of which we may mention යුබ *nuba*,\* had not originally a plural form; although in modern usage ලා *la* is affixed to signify more than one. It was probably this peculiarity which Mr. Justice Stark failed to notice, when he remarked, at pp. 72, 73, that “the term වහන්සේ was applied to the Buddhist priesthood in an associated or collective capacity, as in the passage—පස්වග වහන්සේවහන්සේ in the *Jātakapota*”—where, the reader will observe, five priests are spoken of—an association of five priests to whom Buddha delivered his first sermon.†

Speaking of වහන්සේ as an honorific term by itself, which cannot be called a pronoun, I may here notice a few others of the kind which convey different and various degrees of respect to the person addressed. They are අහෙ *adé* or අබෝ *adô*, බොල *bola*, බ + වසි *bandayi*,‡ used as “terms of address” with කෝ *tô* : as අබෝ මෙහෙ වර ‘Come here, fellow;’ බොල කාටද මහොම කෝ කතාකලේ ‘To whom didst thou thus speak, fellow?’ ඇයි මන්වයි තට බද්ද ගත්ට මම කීවාදාය ‘Why, fellow, did I tell thee to take the lease?’ &c.

These epithets, like the pronoun කෝ, are used both in an affectionate and a contemptuous sense; sometimes by the higher towards the lower classes; and sometimes also by the lower classes towards each other. This promiscuous use, however, militates against the supposition to which Mr. Stark has adverted, that බොල is derived from බොල් ‘dross,’ ‘rubbish.’ බොල and බොලන් are derived from බල and බලන් respectively, and mean ‘Behold’—whence they are used as vocatives or terms of address. බාහව, බොලන්, and මයි which are

\* See *Siddh Saggardwa*, p. clvii.

† See Ceylon Asiatic Society’s Journal, vol. I. p. 11. Also Bengal Asiatic Society’s Journal, vol. VII., p. 815.

‡ “In Nepaul,” says the Rev. Spence Hardy, “the priests are called *bandayá* (whence also the Chinese “bonze,”) which in Sanskrit signifies a person entitled to reverence, from the word *bandhana*.”—*Eastern Monachism*, p. 11.

used with *කමුණ* or *උම*, are terms of regard or attachment used frequently amongst the lower classes: the first by husbands towards their wives *et vice versâ*, and by ordained priests towards their Sâmanéra pupils, as *බාකම* *ප්‍රචිච්ඡාදකයා* tantamount to “I say, Master Priest:” the second, amongst relations, friends, and equals speaking kindly to each other,\* by old people towards their wives *et vice versâ*; and the third to males alone, as by wives to their husbands, or by a superior to his inferior speaking familiarly. This last, as well as *අබ* *අද්ද*, I am inclined to believe to be of Tamil origin.

There is another word *මහ*, which I shall notice here. It is only used when no other term can be properly applied to a person either without offence or without conveying too much respect. The reader should, however, bear in mind not to confound this word with another of a sound *මහ* “he” or “yonder person,” which is used in familiar intercourse amongst the Singhalese to signify a person near the person spoken to, or opposite to the person speaking. Like *මහ*, *කය* may be used in the third person, when the degree of respect due to the person spoken of, is uncertain or unknown.

I may also here notice another class of words which are terms of address, other than vocatives, and used as honorifics to particular individuals, as; “Mudianse *râlahâmi*,”† “Mohan-*diram mâhatmayâ*,” “Lekam *mâhatmayâ*,” “*Ârachchi râla*,” &c.; but I prefer following the order of the learned writer before me, who treating of the honorific *වහන්සේ* makes the following remarks at p. 69.‡

“*වහන්සේ (vahanse)* is added as an affix to the term for God, and to all the names of God; as also in some relative expressions, as to Father in the Lord's prayer, *අපගේ පියාකන්වහන්සේ* *Apagê piyânan-vahanse*.

“But under the word *දෙවියන්වහන්සේ (Dewiyanvahanse)* Clough points out the difference in its use. Innumerable instances, he says, occur of

\* When a native wishes to convey that he is on good terms with another, he would say:—“Why, we address each other *umba* and *bolan*.”

† The Kandians use “Mudianse-*mâhatmayâ*,” but this is a provincialism.

‡ Here, as elsewhere, the references are to Mr. Justice Stark's Essay on *Forms of Salutation*, &c., in the Society's Journal for 1853.

the honorific being used in the vocative, in which case it may be addressed not only to one of these beings (the gods of *Swarga*,) but also to a king or any person of rank ; but when used in the nominative, it marks at once the difference between a heathen god and the Supreme being."

Mr. Clough it would seem is incorrect in supposing that **ඌව්ව්ව්ව්ව්ව්** in the nominative alone, conveys the difference between the Supreme being and a heathen god. For, the difference is not the less marked in the oblique cases (except the vocative) owing to the definite form of the expression ; from which circumstance alone are Christians enabled to limit its application to the one Jehovah of their faith. This distinction, though trifling, nevertheless furnishes the strongest possible argument in favor of "the continual recurrence of the honorifics in Sighalese translations of the Holy Scriptures," which, however, says Mr. Stark "soon offends Europeans, and in some cases, as "*Jehovah vahansé*," the affix almost shocks, coming upon the ear like some discordance in an otherwise heavenly melody." If the repetition of honorifics be, as doubtless it is, offensive to the European ear accustomed to the simplicity of that language, 'whose soul is brevity ;' the absence of their recurrence is not the less offensive to the Sighalese, whose notions of the beauty of a language are diametrically opposed to those expressed by the bard of Avon.

It is remarkable that the Sighalese **ඌව්ව්**, *devi* like the English word 'God,' is descriptive—the former signifying 'splendour' or 'beauty' or 'purity' of the object to which it is applied, as **සූර්‍යාඌව්ව්**, "The divine majesty of the Sun," or as in the *Milindapprasna*, simply **සූර්‍යඌව්ව්** 'the divinity of the Sun :' and the latter the 'goodness' of the being who is designated by that term. Like the English word 'god,' the Sighalese **ඌව්ව්** is also used by us to signify "a prince, a ruler, a magistrate," (Exod. xxii. Psal. xcvi.) ; or any person exalted too much in estimation, or deified and honored as the chief god. (Phil. iii.) But there is a distinction which some writers have drawn between *devi* as applied to a god of *Swarga*, and the same when used as a term of address to kings, &c. It is

thus noticed by Mr. Justice Stark in the following note; but without perceiving the difference in their orthography:—

“The same term දෙවියන්වහන්සේ (*Dewiyanwahanse*) is employed by Mr. Alwis in his Siphalese version of the *Hitopadésa* as the corresponding phrase for ‘Please Your Majesty!’”

The reader will however observe, that both in the extract from the “*Thúpawapsa*” in my “*Sidat-Sanggaráwa*,” (p. cixxv,) and in my Siphalese version of the *Hitopadésa* (pp. 205-6.) දේවයන්වහන්සේ and දේවයෙහි\* are alone used to express “His Majesty,” and not දෙවියන්වහන්සේ and දෙවියෙහි, which latter are applied to the various deities of *Swarga*.

The words පති *pati*, ඉදු *indu*, ඉන්ද්‍ර *indra*, ඉසුරු *isuru*, ඊශ්වර *ishwara*, නා *na*, නායක *ndayaka*, each signifying ‘chief,’ when added to words indicating ‘earth’ are appellations of Kings. Thus, මිහිපති or මහිපති, බ්‍රහ්මා, මහිඳු, මහින්ද, බ්‍රහ්මරා, දෙවනපුරා or බ්‍රහ්මරා, බ්‍රහ්ම, දිශාපති, මහිනායක, &c. With a view to gratify the vanity of kings, who anciently laid claim to universal empire,† they were so designated; and also ලෝපල්, මිහිපල්, මහා or බ්‍රහ්ම, in the sense of ‘nourisher of the world.’ In the sense of being ‘the chief of men,’ a king is called කරයෙට, or කරනිඳු or නිරිඳු, කරවර, කරපති, කරනා, කරවරය, &c. The designations for ‘Queen’ are not many. They are බිසෝ and මයෙහි, and are changed into අගබිසෝ and අගමමෙහෙසුන්, when applied to a Queen who has been crowned, or an Empress. The words දේවයන්වහන්සේ and දේවයෙහි\* are changed into දෙවියන්වහන්සේ and දෙවියෙහි (see “*Sidat Sanggaráwa*,” p. 205,) when we intend to express “Her Majesty”; the term for ‘goddess’ being usually දෙවියෙහි formed like the ancient term for a ‘princess’ රජු or රජු.

\* *Devi*, literally ‘Goddess,’ but applied to a Queen, as the masculine form *Deva* is especially the title of a King. Professor Wilson’s “*Hindu Theatre*,” II., p. 316.

† Thus saith Cyrus King of Persia, the Lord God of heaven hath given *all kingdoms of the earth*.—Ezra i. 2; Judith ii. 1. See also Luke ii. 1. The vain and ‘flattering titles’ (Job. xxxii. 22,) which the Siphalese Kings received in ancient times, expressive of the most eminent qualities, were many and various.—See Burder’s *Oriental Customs*, p. 189.



In the sense in which it is applied to man, දේව is synonymous with උතුම, from whence we have උතුමානන්දයානේ 'His Excellency the Governor,' "which is the title" says Mr. Stark, "given by the translators on one occasion to the Governor of Judea" at Matt. xxvii. 2. The word මහත්මයා 'He who is great' is derived from *Pāli*, මහත්තම and is equivalent to උත්තම 'chief; "excellent," high,' but Mr. Stark is far from being correct when he supposes that මැති, which is derived from the Sanskrit මන්ත්‍රී, has any relation to උතුම, or to නමැති in the line of the royal poet :—

"පවර, නමැති, මෙරකොට, යති, ව්‍යාවන්."

Here නමැති, from නම 'name,' and ඇති 'having,' which means "named" has no connection whatever with මැති. *Meti* Siṃhalese, *metes* Greek, *mantra* Sanskrit, *mati* Pali, *mens mentis* Latin, are the words which stand in fraternal connection with each other, having been probably derived, like *manas*, *mens*, and *mind* from the root *man* 'to understand.' From මන්ත්‍ර the Siṃhalese have coined a beautiful compound නීතිදයකමන්ත්‍රණසභාව for 'Legislative Council,' and it is fully expressive of the nature and working of the particular Deliberative Assembly, for which it is a designation.

Mr. Stark proceeds to an investigation of the titles and titular ranks amongst the Siṃhalese, and finds nothing of the nature of the English nobility. If the learned writer here refers to the peculiarity of the relation in which the nobility of England stands to the Commonalty, he is right. For Ceylon has no nobility, which, as in England, sends down members to mingle with the people. Here the distinction of caste and class is the barrier which divides the nobleman from the commoner. Whilst there, in England, the ranks of the nobility are largely recruited from among others, there is here a wide gulf between them which neither wealth, interest, nor education enables the plebeian to cross. There it is regarded as "no disparagement for the daughter of a Duke, nay of a royal Duke, to espouse a distinguished commoner."\* Here it

\* Macaulay's "History of England," pp. 37, 38.

is quite the reverse.\* Whilst therefore, there are these and other differences which distinguish the English nobility from all hereditary aristocracies in the world, there is also some similarity between the English and Singhalese nobility. As no title raised any one to the rank of 'Thane' amongst the German Saxons, except noble birth and the possession of land; so amongst the Singhalese, in an early age, none were regarded as of the nobility who were devoid of those qualifications.

A long line of ancestry descended from good blood in the highest caste (the *Goyi-waṇṣē*, the cultivators or Vellālas†) alone constituted in Ceylon, the nobility of the land.‡ Between good blood and the privileges of the nobility, there *was* (for my remarks have reference to *the past*, when Ceylon was governed by the Singhalese Kings) an important connection. The various officers of the state, including Prime Ministers, Ministers, and Provincial chiefs, were selected from those who could trace back an honorable descent through many generations. They formed the first or chief class of society: and those who bore titles, as well as those who stood with them on an equal footing in point of birth, constituted the nobility of the land. To this body, which increased only with their families, no accessions were ever made, except as we find, from two classes of persons. One, the natural children of Kings and Princes, who were alone entitled to the appellation of *Baṇḍra*; and the other, those whom the Monarch had honoured by raising to, what Mr. Stark calls, the "eminent

---

\* "The marriage of a man with a woman of a superior caste to himself is prohibited, and even carnal connection between the sexes of different castes is penal, especially the connection of a higher caste woman with a low-caste man."—Sawyer's *Kandyan Law*, p. 26.

† "The *Goyi-waṇṣa*, *Goyi-gama*, *Ratē*, or *Handuruwō*, compriseth the *Baṇḍra wāliya*; families of the highest rank, who claim descent from Princes."—*Armour's Kandian Law*, p. 3.

‡ "It is the more usual course for the cultivators of the soil to be regarded as forming the noblest class of the people, next to that who held rank as hereditary princes; they are the eunuchs; they form the timocracy; and it is from them the rulers of the state are chosen; as delegates of the King when the Government is monarchical, as temporary chiefs when it is an aristocracy."—Spence Hardy *Buddhism*, p. 75.

place" of *Siṭu*. Various instances, as those of *Ghósaka*, *Pawárika*, *Mahadana*, *Sumana*, &c., may be adduced from native records, of persons created *Siṭu*, simply owing to their great wealth.

This may however, appear strange, when we reflect on the hindrance of caste to the social system in the East. One would be led also to believe, that something more than mere wealth was necessary to give claim to the privileges of this distinguished title. Not so. There is perhaps not a single instance on record by which we could find that there was any other recommendation for this gift of Royalty, except the great wealth of the recipient. Of course, it is not to be supposed that this high distinction was conferred on the *Chañḍāla*,\* the lowest of the low in point of caste—men, who by reason of their mean birth, were regarded as fit for nothing but the office of public executioners;† but such of my readers as are read in Bhuddhistical scriptures, know that Mahadugiyā "the great beggar," whose destitute circumstances had been like those of Lazarus in the parable of Christ, was raised to the nobility, on his acquiring a great treasure by his meritorious conduct towards Bhuddhism.

There is also an instance in the *Ratand-waliya*, of a poor *Siṭu*'s servant acquiring great wealth by reason of his charities, and of his thereupon being created a *Siṭu* or nobleman. The legend, after describing the nature of his charities and their result, proceeds thus :—

එරත්තනෙන්තවා කෙළුවෙහි රැස්කලත. වවුළුවන් අසුරිකන් විතර ගොඩවිස, රජපුරුවෝ නුවරවැස්සන් රැස්කරවාලා මේනුවර මෙකෙත්වස්සුව ඇත්තේ කාගෙදුයි විතාලේය. කෙස්සවුන්ට මෙකෙත් වස්සු ඇතිවන්නේ රජවසිව් බුබුලතන්සේට ඇත්තමිවේදැයිකිවිස. රජපුරුවෝ එතුමා මෙකෙත් වස්සුඇති තැනැත්තවුන්ට සිටුකතතුරු නිසිවේදුයි බොහොතමපත්දී සිටුසේසත්තංවා සිටුකතතුරුදී බහුබන්ධ සිටානෝයයි තමුන්දුන්ත.

\* "The *Sedol* or *Chañḍāla* is represented as one who is born in the open air; his parents not being possessed of the smallest hut, where, as he lies among the pots when his mother goes to cut firewood, he is suckled by the bitch along with her own pups."—Spence Hardy on *Buddhism*, p. 86.

† See Wilson's "Hindu Theatre," vol. i. p. 159.

That is to say :—

“They heaped up the gold in the compound ; and the heap was about eighty cubits high. The King summoned the citizens and inquired of them, if there was any other in the city who owned such an immense wealth. They replied, that insignificant men could not possess so much, when His Majesty himself had it not. When the King had heard this reply, he said that the owner of such wealth was indeed a fit object for the nobility (*Sitū*) ;\* conferred on him further riches ; hoisted up the white canopy of state ; created him a *Sitū* ; and named him *Bahudhana Sitāno*, or ‘The great opulent Sitū.’”

If therefore, from the fact of a *Sitū*'s being a nobleman by creation, and of his being thereby entitled to the privileges of the Singhalese nobility, a comparison may be instituted between an English Baronet and a Singhalese *Sitū*, I trust my observations in the “*Sidat Sangarāwa*,” to which Mr. Stark refers, were not misconceived.

It appears from the “*Mahāwaṇsa*” that the consort of Aśoka, the great Monarch of India, was the daughter of a *Sitū*. The passage to which I refer is the following : “While Prince Aśoka was ruling over the Awanti country by the appointment of his own father, on a journey to Ujjeni he arrived at Chétiya ; and while tarrying there having gained the affections of the lovely princess Déwi, the daughter of a Setṭhi, he lived with her.”—*Mahāwaṇsa*, p. 76.

---

\* ගෙවි *Setṭi* or ගෙවි *Heṭṭi* is still vulgarly used to signify ‘a rich man ;’ as for instance, speaking of a man hoarding up riches ගෙවිගෙවි ගෙවිවරු ; බෙලු වූ ගෙවිවරු වෙද. It appears from Hindū books also, that a *Sitū*, who is called in Sanskrit *Śrēṣṭhi*, and whom Professor Wilson designates ‘Chief of the Merchants’—perhaps from the circumstance of his opulence—was a nobleman who took part in the affairs of the State. In the Hindū play denominated *The Toy Cart*, in Wilson's Hindū Theatre, vol. i., p. 145, a *Śrēṣṭhi* is introduced as the Judge of “Recorder” of a Court.

† This is a proper name, and not a designation implying ‘Queen,’ as in the following passage in the *Ratanāvaliya*, the Hindū play :—

“Madam, You justly possess the title of *devi*.”

Although the children by this lady were admitted into the privileges to which princes were usually entitled; yet it would seem, that upon Aśoka's ascending his father's throne of Pāṭaliputra, *Dēvi* was not crowned 'Queen consort.' From this circumstance\* we gather, that a *Sitū* was equal in rank to a Prime Minister, or even Sub-King, but inferior to the Royal family.

Whilst on the subject of Monarchical councillors, of whom a *Sitū* was undoubtedly one, we may here glance at the state of that *Council*, the want of information regarding which Mr. Stark remarks. But in doing so, it may perhaps not be out of place to notice a few of the titles of address of those who composed the Executive Government of Lañkā.

Although the Government of Ceylon was in the abstract a Despotic Monarchy, where the will of the Sovereign passed into a law; yet it is remarkable that in ancient times, when pious and talented princes ruled over the destinies of this Island, nothing of any importance was done or decreed without the advice of the අමතමන්ඩල *Amātyamaṇḍalē* or the Council of State. Indeed the Institutes of Manu, which formed the basis of the polity of all Indian Governments, including that of Ceylon, required that the Sovereign should be assisted by his Ministers.† Thus, we read in history, that whilst different parts of the Island which constituted subordinate principalities, were each placed under a *Yuva-rājā* or 'Sub-

\* "The mother of the Thero Mahinda, (son of Asoka) sending her children to the King's court, continued to reside herself at the city of Chētiyagiri." *Introduction to Mahāwagga*, p. xlvii.

† "And all that must be done by him (the King) for the protection of his people with the assistance of good ministers, I will declare to you as the law directs in due order."—*Manu*, chap. vii. § 36. "Let them perpetually consult with those Ministers on peace and war, on his force, on his revenues, on the protection of his people, &c. Having ascertained the several opinions of his council'ors, first *apart* and then *collectively*, let him do what is most beneficial for him in public affairs."—*Ib.* §§ 56, 57.)

King,' the chief kingdom was presided over\* by the *Muha-rāja* or Monarch himself, who had no less than seven Councillors, or Ministers attached to his Court. In later times, however, this number was reduced to four; and yet these four, with the King at their head, formed the Cabal, Cabinet, or the Privy Council of Ceylon. Collectively, their duty was to assist the King in the executive and legislative functions of Government, which were vested in the King; but individually, they had separate duties assigned to them. The "Premier" was the *Puróhita* Minister; and when a Bráhmín, he was the domestic Chaplain of Bráhmín Kings. He was to attend on the Kings; that is, he was attached to the King's household. One had the care of the Metropolis, "Home affairs," in respect of which he may perhaps be styled, "the Secretary for the Home Department," whilst another was "the Minister for Foreign affairs," and the dispenser of Justice; the latter office being analagous to that of the Lord Chancellor of England. The fourth was "the Minister of War."

The Singhalese Ministers of State, latterly, received the appellation of "*Adigars*," i. e. *Adikáran*, from අධි *adhi*, 'over,' 'above,' 'upon,' implying superiority in place; and *karāṇa* the instrument in the sense of executive; but little mention of them is made in ancient books, which only refer to මැති *meti* or මන්ත්‍රී *mantri* "Councillors."

It is foreign to my purpose here, to enter into a consideration of the different duties attached to them, the perquisites to which they were entitled, and the privileges which they enjoy. In pursuing my investigation of the names of native

\* In the *Raja Tarangini* these seven officers are stated to be 'The Justiciary or Chancellor,' 'Treasurer,' 'Master of the Military Stores,' 'Commander in Chief,' and 'Messenger or Ambassador,' 'Royal Chaplain,' and 'the Chief Astrologer.'—See "*Asiatic Researches*," xv. p. 21. Also in *Manu*, § 54. "The King must appoint seven or eight Ministers."

† From this inseparable preposition *adhi*, we obtain *adhipati*, a term which may be properly used to signify "Chairman," "President," and even "Judge" or "Governor."

titles, and their significations, I shall pass on to the "Officers of the Palace,"\* or the King's household.

It consisted of a great many office-bearers. Dr. Davy, (who was indebted for the interesting account which he has published of these officers to Milḷewé, the Disáwa of Wellassa,) gives 36. A *Gajandýaka Nilamé* seems to have been the principal of them. As the term implies, he was 'the Chief over the Elephants;' and probably his superiority over the rest arose from the great estimation in which elephants were anciently held, as one of the මතුරාපතිවරු or 'the four constituent armies of war.' His office was analogous to that of "The Master of the Horse" in England; and under him was placed a *Lékam* or 'Recorder,' who obtained the designation of *Kúruwé Lékam*, the word *Kúruwé* signifying his connection with the 'Elephant department.'

The *Maha Aramudal Wannaku Nilamé* was the 'Lord of the Treasury,' an office of the highest rank, which corresponded with that of *Bāṇḍágárika*, and to which anciently even princes were appointed, as for instance, Prince Ghotabhaya.† The *Maha Gabaḍá Nilamé*, and the *Uḍa Gabaḍá Nilamé*, were also 'Treasurers,' each with distinct duties to perform. The officer answering to the "Lord Chamberlain" of the English Court, may perhaps be identified with the *Haluwaḍana Nilamé* of the Siphalese. He brought to the King his apparel, his sword, crown, &c. He dressed and undressed the King, and waited on him for the purpose of adjusting his dress. The *Batuwaḍana Nilamé*, the officer who had the management of the royal table, and the *Diyawaḍana Nilamé*, who superintended the royal bath, were officers who approach very near to the "Lord Steward" of England. Under these were many subordinate officers, of whom *Sattumbis* were the people who poured water on the King at his bath, and *Pihanarálas* were royal cooks. It is needless to enter into a minute detail of the names of the other officers.

---

\* Davy's Ceylon, p. 143.

† See *Attanagaluwaṇṣa*, and also *Muháwaṇṣa*.

They are chiefly descriptive of their several occupations. The reader may obtain a great deal of information on the subject by a reference to Davy's Account of Ceylon, where the names are given at length, with an account of the various duties which the officers performed.

The Ceylon Council of State, and our ancient Court were not unlike those of the Hindús. From the mention of various terms which occur in books, we gather that the members of whom the Singhalese Court consisted, were the same that are referred to in the Hindú Plays;\* such as, *Mantri* or "Councillor," *Dúta†* or "Messengers," *Wadhakayá* "Death's Minister,"—of which there were two kinds, wild animals, such as elephants and horses, and *Wadakaru* or "executioners,"† *Chura purusa* or "spy," *Nándyak kára* or "disguised emissary or informer."‡

---

\* The Court looks like a Sea;—its Councillors  
Are deep engulphed in thought; its tossing waves  
Are wrangling Advocates; its brood of monsters  
Are those wild animals—death's Ministers—  
Attornies skim like wily snakes the surface—  
Spies are the shell-fish cowering 'midst its weeds,  
And vile Informers, like the hovering curlew  
Hang fluttering o'er then pounce upon their prey!

Pr. Wilson's "Hindu Plays," i. p. 149.

† This word Pr. Wilson interprets to mean "attornies," or "the enveys or representatives of the parties." *Loc. cit* i. p. 149. *Note*.

‡ Tradition says, that in ancient times in Ceylon, a criminal underwent the same ordeal that is described in the following passage in the Buddhistical annals:—"In aforetime, the Wajjian rulers, on a person, being brought and presented to them, thus charged: 'this is a malefactor dispose of him accordingly.' They surrender him to the *Winichchhaya mahá-machhi* or 'chief Judicial Officer.' Having examined him, if they conceive 'this man is not a culprit,' they release him. If they decide, 'this is a malefactor,' without awarding any penalty, they transfer him to the *Wohd-rika*, 'learned in the laws. They also having investigated the matter, discharge him, if he be innocent; but if he be guilty, there are certain officers called *Suttadharu*, 'maintainers of the Suttan,' to whom they transfer him. They also inquire into the matter and discharge him, if he be innocent; but if guilty, they transfer him to the *Atthakulaka*, 'a Judicial institution composed of Judges from all the eight tribes.' They also having observed the same procedure transfer him to the *Sénápati* [translated by Turnour] 'the chief Minister'; he again to the *Uparája*, 'Sub-King'; the *Uparája* to the *Rája*. The King, inquiring into the matter, if he be innocent, releases him; but if he be guilty, he causes the *Pawenipotthakan*; 'book of precedents or usages,' to be propounded. There it is written,—to him, by whom such a crime is committed, such a punishment is awarded. The *Rája* having measured the culprit's offence by that standard, pronounces a suitable sentence."—Turnour's *Buddhistical Annals of Ceylon*.



Referring to the difference generally between English and Sighalese officers of Government, Mr. Stark says :—

“The Government Agent is sometimes styled *Disáva*. But there can be no analogy among officers in systems of Government so very different as respects the distribution of official power and duty, as the English and Sighalese; and it only tends to perpetuate misapprehension to use the names indiscriminately.”

In the case of *Disáva* being applied to the “Government Agent,” no misapprehension results; and in my opinion, a better designation could hardly be conceived, as one with which the Sighalese are altogether familiar, and one too, with which so much respect is associated in the native mind. A *Disáva*, or more properly *Disápati*, under the Sighalese Government, was a “provincial chieftain,” who had principally the management of a province: similarly, the Government Agent of the Ceylon Government at the present day is the chief revenue officer of a Province. The analogy between the two officers is apparent, and the propriety of the native designation, is therefore unquestionable. There are also several other European titles to which native terms are peculiarly applicable; as for instance ക്രൈസ് for “Clerk;” ഹൈവെറ്റർ for “Lieutenant Governor;” വാമൊഴിക്ക for “Treasurer;” ഷെർവാൻ for “General” or “Chief of the Forces;” വെറ്റർ for “Prince Consort;” അംബാസാദർ “Ambassador;” &c. Not so, however, as respects certain other offices which are ill-expressed by any titles of address known to the Sighalese. Of this class are “Auditor General,” “Post Master,” “Surveyor General,” “Secretary,” &c. For the last, the Sighalese in their graver compositions, unmixed with English phraseology, adopt the title of രിപ്പകാരൻ; but it is apprehended, that it is not fully expressive of the English term. It is therefore, I believe, that in our Courts, the English word is adopted: in regard to which Mr. Stark says:

“The Secretary of the District Court subscribes himself *Secretary Swámtha*, which is derived from *Swámi* or *Swámiya*, a lord or master. This appears singularly inappropriate, his proper appellation as Clerk of Court is certainly *Unnduse*.”

Here is some misapprehension. The title of the Secretary in question is simply *Sekratáris*, (the *s* being an affix added in composition for the sake of euphony, as *n* in *Dewiyan*) ; and he does not conclude with any honorific, but with simply වමහ *wamha*, which means “we are,” for “I am.” Thus it will be perceived, that the words used by the Secretary, viz. *Sekratáris wamha*, were mistaken by Mr. Stark for *Secretary swámiya*. If however, the case be as stated by the learned writer, there is no doubt but that the appellation of “lord” or “master” is “singularly inappropriate” to a Secretary, as මහත්ම *mahatma* is unquestionably so to the Government Agent—who nevertheless uses this high honorific in all his correspondence with his native headmen.\* A Mudaliyár of the Gate, who was addressed in this style, returned the *óla* epistle to the Government Agent, and addressed him as follows on the 10th March 1839 : “I did not receive it (the letter) because it was written in a manner disgraceful to me : and I do not make the least doubt that if you are acquainted with Singhalese, you would, on looking over the style or phraseology of that *óla*, be convinced of the impropriety of the same.” See translation of the document in the Colombo Kachchéri.

Whilst on the subject of *swámi*, I may perhaps here notice another inaccuracy into which Mr. Stark has fallen, by rendering *Maha-himiya*, ‘the great proprietor’; and in supposing that the priest Sēriyut was so called from his having been ‘a great and distinguished author of his time.’† *Himiya* here means *swámiya* ‘lord,’ and not ‘proprietor :’ and proprietorship and authorship are not convertible terms : nor have they such a relation to each other as to render one term applicable to the other in a secondary sense.

---

\* The practice is reported to have existed for “twenty-five years” prior to the date of the letter referred to in the text. See L. De Livera, Attapattu Mudaliyár’s report, March 14, 1839.

† Probably Mr. Stark fell into this error by reading Armour’s “Kandyan Law,” where *himi* (as in *lat himi*, ‘domination by right of purchase’) is used in a secondary sense to mean ‘right of acquiescence,’ ‘proprietorship.’

*Hāmu-duruvā* (see "Sidat-Saṅgarāwa," p. 160,) is derived from *himi*, which comes from *swāmi*. It does not sustain, as stated by Mr. Stark the "combined sense of master and instructor;" for it is never used towards a lay instructor, although it is peculiarly the appellation of the last of the triad of Buddhism, the priesthood. Yet the priest does not obtain it in his capacity of "master" or "instructor:" it is given to him owing to his peculiar sanctity,\* as 'one of the three gems of adoration and worship.' Following the practice of the Buddhists in this respect, the Sīghalese Roman Catholics apply this term to their priests.

The designation of a "teacher" is ගුරු, from ගෞරව 'honour,' 'respect.' 'veneration'; and in that sense it is also applied to a parent,† It is used with the affix වහන්සේ and කන්හිස, when greater honor is intended; yet it is a curious fact, that the same word ගුරු when used with the affix නිකාය, as ගුරුන් කිසි කාලය conveys the idea of an instructor of *mean* or *low extraction*.

Before entering upon an investigation of the terms applied to the Buddhist priesthood, of which Mr. Stark has treated in different parts of his essay already referred to, I shall here remark that *Mudali*, from whence we derive *Mudiyaṇṣé* or "*Mudaliyār*," is of Tamil origin, and means 'chief' or 'principal.' Amongst the Kandyans *Mudiyaṇṣé* is not unfrequent as an agnomen; and they, like the Tamils of India, assume it without any authority from the Crown. The maritime natives, however, obtain it formally by an act or warrant from the Governor. In this respect the British Government follows the example of their predecessors, the Dutch and the Portuguese.

\* "Of those who have no fixed habitation. the priests, the *Paśé* Buddhas, and the supreme Buddhas, are the chief."—*Spence Hardy's Translations from Buddhist Scriptures.*"

† "The father who performs the ceremonies on conception and the like, according to aw, and who nourishes the child with his first rice, has the epithet of *guru* or 'venerable,'"—*Institutes of Manu* II, § 142.

The *Mudaliyárs* or Chiefs are of two classes, *වහල* or 'of the Royal Palace or Household,' (usually called "the Gate," after the Portuguese who gave it the appellation of *Porte*, from a misapprehension of the Siphalese word *වහල*, which also means 'door' or 'gate') and *අපරාජය* or 'Provincial Chiefs.' There were originally two other classes, which are known as *කුරුමේ* 'the Royal Equerry,' and *බණ්ණායක* or 'the Ecclesiastical chiefs.' To these may be added a fifth class—*කොරළු* or 'the District Chiefs,'\* Under each were placed different subordinate headmen, called *Muhandirama*, *Vidána-Arachchi*, *Arachchi*, *Kangáni* and *Vidáne*. The last is derived from the word *විධාන* 'commanding,' or 'ordering' and means, as Clough defines it, "the person who conveys the orders of Government to the people." Over all the headmen is placed a *Maha Mudaliyár*, the *Maha Nilame* of the Kandyan, or 'the greatest of the chief.' If any person, whether titled or untitled, can trace his descent to a *Mudaliyar*, he is said to be of the *Mudali pérúwa*, the correct interpretation of which is, 'of the class of Chiefs,' rather than "the titled class," as rendered by Mr. Armour.

Besides the ranks and titles which the natives obtain from the Crown, there is also a class to which particular individuals are entitled by reason of birth or position. Of these we may mention *Gamarála*,† equal to a "County squire" in England, but not held in the same estimation in Ceylon.‡ He is however of the highest caste (*Vellála*,) and one who in point of wealth has a competency for his subsistence. *Appuhámi* "is the rank of a 'gentleman,' of the highest class of the

---

\* For a tolerably correct description of the duties of the chiefs of the Maritime Provinces, see *Colombo Journal*, 1832, p. 262.

† This title is rendered *ගම්මුදලියා* *Gammudaliyá*, 'the chief of the village' in a Siphalese version of the tale of the King Adahasmuka.

‡ Mention is made of the election of *Gamarálas* under the provisions of the Paddy Lands Irrigation Ordinance; see Proclamation in the Government Gazette of the 24th July 1858.

Vellálas" who anciently enjoyed certain privileges which are now denied to them; and *Appu* that of the plebeian, equal in its application to "Mister." As honorary terms of address by which persons of different castes are distinguished, I may mention *Handuruwá*, confined to "Vellálas"; *Naidè* to "Smiths"; *Hénayá* to "Washermen"; *Ridi* to "Washerwomen"; *Métrí* to "Barbers"; *Mahabuddu* to "Cháliyas"; *Batgamayá* to "Paduwas"; *Nēkati* to "Tomtom-beaters"; *Wahumpurayá* to "Jaggerers," &c. &c. Whilst the above are mere honorary designations of different castes, there are others which are used as terms of affection and endearment to persons of low-castes; as for instance, *Héna Mámá*, "Uncle Héna" to a Washerman; *Ridi Nēndá*, "Aunt Ridi" to a Washerwoman, *Vaḍurála*, "Master Carpenter" to a Carpenter; &c. &c.

There are also certain terms of respectful designation by which persons of different trades are distinguished, as for instance *Maṇḍāḍirála*, among Karáwas, 'for the man in charge of a part of a fishing net, called *manda*'; *Hannēdirála* 'the owner of the fishing boat,' or 'the chief of the fishing band.' Formerly Moormen composed the class of people who were generally employed as Masters of trading vessels; and they received, in the sence of *Tindal*, the appellation of *Marak-kalayá*, a term now applied to others who perform the same office, and also to the Head Moorman.

Whilst the above are the ranks and titles of address of maritime native Siphalese, those of Kandians appear to be different, with some exceptions which are *Kórála*, *Mohottála*, *Arachchila*, *Lékama*, and *Vidáne*; and, says Mr. Justice Stark in reference to them:

"The above, namely, the Adigar, Disáva, and Raṭémahatmayá, were the principal officers under the Siphalese Government; and in the convention of 1815 entered into after the conquest of Kandy by the English, for the cessation of hostilities and the settlement of this country by a formal declaration of the power and principles of the new Government, they are mentioned or alluded to as the principal chiefs of the Kandyan Provinces, and the *Mohottála*, *Kórála*, *Vidána* and others, the subordinate headmen from the Provinces."

To the above may be added *Basndyaka* and the *Diva Nilame* (the word *Nilame*,\* 'Officer' alone being sometimes used as a term of address to a titled person), which are amongst the titles of chiefs; and *Atukórāla*, *Arachchila*, *Vidāna*, amongst those of petty headmen. I have already alluded to *Baṇḍā*, and the original acceptation of the term. I need only here refer to it, to shew that it is now assumed by every Kandyan of the Vellāla caste, in the same manner that the appellation of *Appuhāmi* is affixed to the name of every maritime Vellāla (and frequently of Karāwas) without distinction, and contrary to the original usage, by which only a gentleman was entitled to it.

I cannot close my remarks on this part of the subject, without attracting attention to a mistake into which Mr. Stark has fallen, in common with a number of European writers, who consider the maritime natives to be distinct from the Kandyans, whom alone they regard as "*the Singhalese*, strictly so called." Mr. Stark remarks :—

"The Kandyan or hill country is distinguished from the lower or maritime districts, by the same name, *Singhalé*; and the town of Kandy is *Maha newara* the *Megalo-polis* or 'great city,' the Metropolis. These names are easily accounted for, but they are recorded as given."

Now, the Kandyans, like all highlanders, are certainly distinguishable from the Maritime Natives. From the salubrious air which they inhale amidst their upland hills, the Kandyans are braver and more hardy than the people of other provinces. The independence which they enjoyed until comparatively a short time ago, has tended also to elevate their general bearing over that of the people of the Southern and Western Provinces. They have preserved too, their religion and language without suffering much from the various colonial influences to which the low-landers have been subjected for three and a half centuries. The latter, by the change of their religion, occupations,

---

\* This, when affixed to *Maha*, is used to signify an Adigar, or the *Maha Mudaliyar*.

and habits, may have slightly lost the distinct peculiarities which originally characterized the entire Sīḥalese nation ; yet the differences in these respects no more render necessary a distinction in their nationality, than do the accidents of birth-place, or other circumstances, which enable us to distinguish an Englishman of Northumberland from another of Middlesex or Yorkshire, or a native of Galle from one born in Colombo. The difference, however, which has been drawn by Mr. Justice Stark, has arisen from a misapprehension of a single circumstance. It is this. When a part of Ceylon fell into the hands of the Portuguese, and the Sīḥalese Court was removed from Kótté to Kandy, that part of the *Sīḥala-dvīpa* which was retained by the Sīḥalese, was called *Sīḥalé* (the appellation by which the Kandyan Provinces are known to this day,) as contradistinguished from the territory of the Portuguese. The distinction therefore, was one of *territory*, not of *nationality*. It was employed to determine the jurisdiction of the Sīḥalese Government from the possessions of the Portuguese. As the Kandyan Provinces alone (which were retained by the Sīḥalese) became thus universally known as *Sīḥalé*, a misapprehension of its cause and origin led Europeans to distinguish the *Maritime Sīḥalese* from their *Kandyan* neighbours, both of whom are descended from the same stock, speak the same language, are subject to the same habits, and are possessed of nearly the same feelings. Hence the distinction to which reference is made.

There is however one distinction, in respect to their names, which I may notice here. The low country Sīḥalese have more names than their Kandyan countrymen. Whilst the *gé-nama* or 'family name,' the *bat-kavana-nama*, 'the household term of endearment'—usually given on the occasion of giving food to a child for the first time, which is celebrated by a festival,—and the *patabēdi-nama*, or 'the name which is assumed on obtaining office,' are the same in both countries : yet the names which distinguish the *Kandyan* from the *Maritime*

Singhalese are the "Christian names" and "Surnames" \* of the latter. The "Surnames" are those which they have borrowed from the Portuguese, such as D'Saram, D'Alwis, Silva, Perera, Dias, D'Saw, &c. &c., and the example having been first set by the highest families of the land, the lower classes have considered it a privilege to be allowed to assume the like names. As to the "Christian names," they are generally assumed by all classes, both Buddhists and Christians, upon the ceremony of baptism, of which Sir James Emerson Tennent thus writes, in his work on "Christianity in Ceylon."

"It had been declared *honourable* by the Portuguese to undergo such a ceremony; it had been rendered *profitable* by the Dutch; and after 800 years' familiarity with the process, the natives were unable to divest themselves of the belief that submission to the ceremony was enjoined by orders from the Civil Government,"—p. 88.

So they believed at first. But baptism soon became an indispensable rite in regard to their civil rights. One of the consequences of this ceremony was, that the name of the party baptized was registered in the Thombo: and the registration was of the most paramount importance to the litigious Singhalese. In all matters regarding their inheritance, in all their contentions on the ground of illegitimacy, and on various other questions that frequently come before the Courts, registration, and registration alone, is the best evidence of what they seek to establish, or disprove. From the fearful amount of perjury that is to be found in the Courts, they fear that without this documentary proof they will fail to establish their rights: and it is therefore (to use the language of Sir Emerson Tennent in the subsequent part of the passage that I have just above quoted) that, "when a parent upbraids his child in anger, he sometimes threatens to disinherit him, by saying, he will 'blot out his baptism from the thombo.'" So scrupulous however, are they in respect of this registration, that actions have

---

\* In accordance with this practice amongst the Singhalese, the Tamils of Vadukkóddai have assumed, upon baptism, such names as Carpenter Rowe, Morgan, Covington, &c., &c.



often been brought to compel the registration of particular patronymics, and to cancel others to which parties were not entitled.

Thus it will be perceived, that the Sīḥalese resort to baptism, neither as a religious duty, nor as a ceremony which conferred, as supposed by Sir Emerson Tennent, "some civil distinction;" but simply as an operation which alone secured the registration, which they prized so very high.

This leads me to notice a misapprehension under which Sir Emerson labours, when he thinks that "to the present day the Sīḥalese term for the ceremony [*kula-waddanawā*] bears the literal interpretation of 'admission to rank.'" Not so. Owing to a notion amongst the maritime Sīḥalese, that if they adopt in their families a stranger or an illegitimate child, after baptizing him "in their own name"—which follows a registration of the baptism in the Thombo—he would, in the event of their death be entitled to inherit the property of "the adoptive parent's estate." \* *Kula-waddanawā* was originally used amongst the Sīḥalese; but its application at present to the baptism of legitimate children, as well as natural offspring, and children by adoption, is to be regarded merely as a species of *catachresis* in the language. *Kula-waddanawā*, again, is not "admission into rank;" but "admission into family"—a recognition of one's *civil rights*. Thus, the *Kula dēvatā* in the Hindu plays† is the *household* deity, the "object of *hereditary* and *family* worship," the *domestic* god of the Brāhmīns. In the *Seḷalīhiṇisundesa*, the poet directs his winged messenger "cheerfully to remember his *household* god."

“කළඳිතිත්තමකුලඳෙවසිසිංහකට”

\* This is a notion still entertained by many native Sīḥalese, although the Dutch law, to which they are now subject, had completely upset the right which the child of adoption acquired by the Sīḥalese law.—See *Sawyer's Notes on Kandyan Law*, p. 25.

† Vol. I. p. 21.

I presume the notion regarding the "distinction," which it is thought baptism conferred on the native, is without foundation; and Sir Emerson is equally misinformed, when he states, that *Tó Jintiguuá*, which he interprets to mean "unbaptized wretch" is applied by *Buddhist* to Buddhist as a "term of reproach." *Jintigu* is a Portuguese word used in the sense of "gentile," or "pagan" and is only applied by *Christians* to their Buddhist brethren by way of *reproach*; as many of the slander cases before the District Court of Colombo, amply testify. It has no connection whatever with baptism; and I may safely affirm, that no native uses it to a co-religionist, much less by a Buddhist to one of the same creed.

I shall now proceed to an investigation of *religious titles* or "terms of address" to *Buddhist priests*. On this subject, the following passage occurs in the essay already so frequently referred to:—

"A generic name for a Buddhist priest is said by Bridgnell to be *ganin* (Ganinnāṇa) probably from some root signifying learning or wisdom, whence we have *Gaṇeśa* the Hindu God of Wisdom, *gana* a poetical measure, and *ganitaya* the science of Arithmetic. But Clough derives the word differently, and thinks it is an inferior term applicable to the lowest order of priests."

In my opinion, both Bridgnell and Clough have failed to give the correct application of the word *Ḡaṇināṇṣē*. In the first place, it is not a generic term for a 'Buddhist priest'; although people of different creeds (other than Buddhists) vulgarly employ it, as well as the simple *Unnāṇṣē* to signify 'priest'. Sometimes also *ḡaṇa* is used without the *nāṇṣē* in a contemptuous sense, as *ḡaṇayā!* tantamount to 'look at that *ḡaṇayā!*' In the next place, it is not "an inferior term applicable to the lowest order of priests." It is properly the designation of the principal or the chief of a semi-association; "the *nāṇṣē* lord of a *ḡaṇa* class;" \* or, in the language

\* A *Gana*, according to the ceremonial doctrines of Buddhism, is a class or semi-association of not less than two nor more than four priests; and *Saṅgha* is an association of any number of priests above four. Thus, the following passage in the *Milindapapaṇṇa*, referring to the six *Arahats* or *Tirthakas*, ಶಿಷ್ಯವಿವರಣೆಯಲ್ಲಿ ಹತ್ತಿರವಿರುವವರನ್ನು ಹತ್ತಿರವಿರುವವರನ್ನು may be interpreted: "Their Lordships, the six aforementioned, are hierarchs over *saṅgha* associations, and [*gana*] semi-associations."

of Milinda in the *Milindappiṣṣa*; the "head of a sect having fraternities of his own." Hence it is clear, that the word is not derived "from some root signifying learning or wisdom." Nor is it from any such imaginary source that we get *Gaṇeśa* the Hindu God of wisdom, *gaṇaya* a poetical measure, and *gaṇitaya* the science of Arithmetic. *Gaṇeśa* and *gaṇa* like *gaṇinndnsé*, are both derived from the same root *gaṇa* or 'class': the *ya* in *gaṇaya* being merely an affix for the sake of euphony and *éśa* in *Gaṇeśa* being an abbreviation of the word *Iśwara*, 'chief,' whence as 'the chief of a class' it is applied to the Hindú God of wisdom. But *gaṇitaya* is derived from *gaṇa* 'to count.'

The principal terms, however, for a Buddhist Priest are four; 1, *Śrāvaka* from *śru* 'to hear.' 2, *Śramaṇa* (Sans.), *Samana* (Páli), *Mahana* (Siṅhalese), signifying the performance of ascetism; whence it is probable that the epithet *Samanean*, as applied in the religious system of Tartary, is derived. Sir Emerson Tennent, in his work on "Christianity," has the following note in reference to the use made of this term by other nations.

"It is remarkable that this name [*Sámaṇéro*] which to the present day is preserved as the designation of the Buddhist priesthood in Siam and Ceylon, should be the same by which the *Samaneans* or Buddhists of Bahar are described by Megasthenes, who, B. C. 300, was an ambassador from Seleucus to their king; and whose lost work on the state of India at that period is quoted by Strabo and Pliny. The same designation for the priesthood, *Samana*, is applied equally by Clemens Alexandrinus in the second century, and by Porphyry in the fourth."—p. 216.

Referring to the same use of this word, the Rev. Spence Hardy extracts the following passage from "Relation des Royaumes Bouddhiques," p. 60, quoted from *San tsang fà sou*, liv. xxii. p. 9.

"When the four rivers fall into the sea they no longer retain the name of river: when men of the four castes become Samaneans, they receive the common name of sons of Sákya (synonymous with blikchou).—*Eastern Monachism*, p. 11.

The word *Samana* becomes *Hamana* by the well-known transformation of *s* and *h*; and the last, by a process of meta-

thesis, assumes the form of *Mahāna*.\* See “*Sīdat-Saṅgarāwa*,” p. 7. From *Mahāna* we obtain the word *Mahāna-unndnsé* or *Mahān-unndnsé*, which means “reverend ascetic”; but not “the great one,” as incorrectly interpreted by Mr. Hardy, probably by confounding it with *Mahā-unndnsé* which is not the “collective name” of the priests, but a designation by which the chief of a Monastery is distinguished from amongst several who happen to form an association, or to be the subject of conversation or writing.

From the Pāli word *Samāna* and *tra* which in composition becomes *nēra*, we obtain *Sāmanēra*;† and it means a “young ascetic,” “a novice” or “pupil of a priest.” The words which bear the same meaning, and are applied to *Sāmanēro* or priests who have not received the Upasampadā ordination, are *Yatiput* and *Herana*. Many honorifics, which are used towards Upasampadā priests are inapplicable to *Sāmanēro*. Thus we find in the Singhalese version of the *Milindappraṣṇa*, and in one and the same sentence, that a *Sāmanēra* is spoken of as “*Sāmanērayan wahandé*” සමනෙරයන්වහන්දේ;‡ and a *Thera* as “*Bikshun wahansé*” බික්‍ෂුන්වහන්සේ: and where a priest applied “*Saminda*” to his own teacher, a venerable *Samānēro* of upwards of 60 years of age, the propriety of the designation was questioned in the following lines published in the *Yatalaba-Saṅgara*, p. 37.

හෙරණදමුරුවන්කොස්ලෙස්සමන්දලකාදේ  
වරණකරකියත්ථුන්ලෝසිරිත්ඛස්සොමාත්තදේ

3. *Sthavira* (Sans.), *Thera* (Pali), or *Tera* (Singhalese), means “Elder.” It is synonymous with *yati*; and both

\* The proper designations of a priest are *Pabbaja*, one separated from secular life, and *Bhikkhu*, a mendicant. The common Singhalese term is *Mahana*, which is represented as being only a different pronunciation of *Samana*; one devoted to religious meditations for the purifying of his own heart.—*The Rev. D. J. Goughly's Essays in Ribeiro's (Lee) 'cylon*, p. 272.

† See Clough's *Bālawatāra*, p. 89.

‡ Of the *Sāmanēro* the ordained elder priests sometimes use the pronouns *උන්දේ* and *ඔන්දේ*.

are equally applied to a priest after he has been an Upasampadā priest of 10 years' standing. Before, however, he completes his tenth year after ordination, his career is divided into two periods—the first from the date of ordination till his fifth year, and the second from that time until he becomes a *Théra* or "elder." During each of the above periods he obtains the designation of *Nawaka* and *Majjima* respectively. 4. *Bhikshu* (San.), *Bhikkhu* (Pali), *Bik* (Sinhalese) literally 'beggar' or 'mendicant,' is derived from *Bhikshu* 'to beg.'

In a collective sense *Sanga* is used, and means the whole order collectively—'the priesthood,' 'an assembly or an association of Buddhist priests.' The honorific වහන්සේ is usually applied to *Sangayā*, *Bhikshu*, and *Théra*; and ගාමනී to *Gana*.

There is a peculiar etiquette in the use of terms of address amongst the priesthood; which seems to have been regulated by Buddha himself, in the sixth Bhanawāra of the *Parinibbāna Sutta*, where the following passage occurs:—

"අථාඛෝපානඤ්චිතරහිතික්කුඤ්ඤාච්ඤ්ඤාඤාප්පස්සාදේනසමුද්ධවර්ණනිකවොච්චිවසෙතථවංසමුද්ධවර්ණනිකංචරතරොණ්ණානඤ්ඤානික්කුනානවකතරොතික්කු යාමේනවංගොත්තෙතවාඤ්ඤාප්පස්සාදේනසමුද්ධවර්ණනිකංචරතරොතික්කු යාමේනවංගොත්තෙතවාඤ්ඤාප්පස්සාදේනසමුද්ධවර්ණනිකං"

'Ānanda, although priests are now in the habit of (indiscriminately) addressing each other with the term *āvuso*; yet after my death this practice should not be continued. Ānanda, by a senior *théra*, a junior (priest) should be addressed either by his *personal* name, or by his *family* designation, or by the appellation of *āvuso*; and by a junior (priest) a senior *théra* should be addressed *bhante* 'lord,' or *āyasmā* 'advanced in years.'

'*Āvuso*' is *evetṇi* in Sinhalese; *bhante* is *vahanté*; and *āyasmā*, (which means 'thou who art advanced in years' and approximates in sense to the English epithet 'venerable,') is *āyubóvan*. This last is a term of address very common amongst the Sinhalese, and is frequently employed in addressing persons of rank and age, both priests and laymen. *Āyubóvan* is also the form of salutation amongst

na, and in the sense of wishing one 'Good morning' in English, the Singhalese greet one another—*Ayubōwan* 'Long life.' This is a salutation which has no distinction as to rank, caste, or class. It is used by all indiscriminately, by the highest to the lowest, *et vice versâ*.

It is not a little curious to observe that *divusô* (which is simply a vocative)\* has the signification of the English term, 'I say:' this is however in accidental similarity; and the words are no more derived from the same source, than *gargardyaṇa reḷa*, ගර්ගරයානරෙල (in *Milindappraṣṇa*) from "gurgling rill;" or *koka kôk කොකකෝක* from *cocra cōax*. Speaking of the resemblance in the sounds of words in different languages, I may here observe that although the word *ebittayā* "the attendant of the priest," bears a great resemblance to the *ebitikos* of the Greeks, "a bit boy" or a 'stripling,' as stated by Mr. Stark; yet that the word itself is derived from *abhi* 'before,' 'front,' or 'opposite,' and *yukta* 'who or which is;' whence it means "a person who is ever before you;" a "page." I may also here intimate my belief that the Hebrew term *Tirshatha*, applied as a title to the Governor of Judea under the Persians, and mentioned in Ezra ii. 63; Neh. vii. 65; viii. 9; has no connection with *தீர்த்தம் Tirthaka*, as hinted by Mr. Stark. The former is believed by some to have been derived from the Persian word signifying 'harsh,' and by others from a different word meaning 'fear'; and thence applied to a Ruler or Governor as "the dreaded one." But the latter term *Tirthaka* is from *tirtha* 'to ferry over;' thence applied to a "Religious teacher,"† from his being a person who helps mankind to ford the troublous waters of life. In Ceylon Buddhistical works, it is used to signify "a teacher of a sect different from Buddhism," or a "sectarian," an "unbeliever;" or as Mr. Turnour has rendered it in his Buddhistical Annals, "one of the antagonist creed."

\* See Clough's *Bālavatāra*, p. 70.

† Bombay Asiatic Society's Journal, July 1857, p. 401. *et seq.*

To return however to the subject. In accordance with the injunction of Buddha contained in the passage which I have extracted from the *Buddhawansa*, the *Sāmaṇero* address the *Upasampadā* priests *Hānuduruvó*, *Terunnānsé*, *Terunvahané*, *Ayubbóvan*; whilst the latter use towards the former *Tēna*, *Bānavá*, *Punchi-unnehé*, *Tamusé*, *Undé*. As amongst the priests themselves of each class, there are different appellations. For, (to use the language of Turnour) "as in the order of ordination one *Bhikkhu* must be senior to another, an appellation implying equality applied by a junior to a senior *Upasampadā* is disrespectful and irreverent."\*

I shall here notice a peculiarity arising from sectarian animosity, viz., that the priests of the Siam and Amarapura sects do not, when they meet, salute each other. Amongst other peculiarities which distinguish the one from the other, I may also here mention the fact, that the Amarapura sect differs from the Siamese by having both the shoulders covered with a roll of robe. I will not express an opinion as to the correctness or incorrectness of the innovation: but judging from the conduct of the fathers of the Buddhist faith, the adjustment of the robe, so as to leave one shoulder bare (as is the wont of the Siamese sect) seems to be proper, at least in appearing in an assembly. The reader will find frequent mention of this in Buddhistical writers. I shall content myself with three extracts from Turnour's *Pāli Buddhistical Annals*, in the sixth volume of the *Bengal Asiatic Society's Journal*.

"The *Thero* *Ānando* who had attained the arahathood, also repaired to the meeting. 'How did he go'? Saying to himself with the greatest delight, adjusting his robes, *so as to leave one shoulder bare*," p. 517. "Having thus imposed on himself that office, the venerable *Upāli* rising, adjusting his robe *so as to leave one shoulder bare*, and taking up the ivory-wrought fan, and bowing down to the senior priests took his seat on the *dhammāsana* (pulpit)," p. 519. "The venerable

---

\* *Bengal Asiatic Society's Journal*, vol. vii. p. 1007.

Anando then rising from his seat, and adjusting his robes, *so as to leave one shoulder bare*, and bowing down to the senior Bhikkhu, took his place in the *Dhammāsanan*, holding up the ivory-wrought fan." p. 521.

This is an ascetic rite, probably borrowed from the *Institutes of Manu*, where it is laid down, (Cap. II., § 193). "Let him always keep *his right arm uncovered*,—be always decently apparelled, and properly composed," &c. Again in Cap. IV., § 58, "In a temple of consecrated fire, in the pasture of kine, in the presence of Brahmins, in reciting the Vēda, and in eating his food, *let him hold out his right arm uncovered*."

Reference is made by Mr. Justice Stark to *Upāli*, one of the priests named in the above extract, and a doubt is expressed as to whether he was identical with *Upāli Maha Sītu*, the nobleman whose conversation with Buddha is noticed in a passage from the *Amāvatura*, extracted into my "*Sīdat Saṃgarāwa*," p. clvii. They were however different persons. The priest *Upāli* was a barber; but the nobleman of the same name was the follower of a *Tīrthaka*, an heretic. A brief history of the former is given by the Rev. Spence Hardy in his work on Buddhism, (p.p. 231-2); and the same writer gives the history of *Upāli*, the *laic* or "householder." (*ib.* p. 266).

- Having noticed the want of identity between the two *Upālis*, I shall proceed to consider what Mr. Stark calls "the distinguishing terms characteristic of the priest and layman." In one sense, the words *gīhi* and *bhikkhu* have the same distinction which *laicus* and *clerus* have; but, generally, they serve to indicate no other difference save that between the *householder* and the *houseless wanderer*, which latter a priest undoubtedly is, by the rigid vows of his order. From the Sanskrit word *गृह*, *griha* we obtain the term *grikapati*, 'lord of the house,' 'landlord;' beautifully expressive of the English word 'host,' as contra-distinguished from *amuttā* 'guest' or 'stranger.'



As applied to the laic only, there are to be found several honorific terms of address in books ; as for instance *කතෙහි*, "O youths," *පිපවන්හි*, "O prosperous," &c. So also as applied generally to the ascetic, we have *නිද්දායානන්වන්හේ*, a word adopted from the Páli, which frequently occurs in the *Milindapprasna* in the sense of 'Hail ! Your Worship !'

The names assumed by the Buddhist priests are different from those taken by the laity ; e. g., Sangha Rakkhita ; Dhamma Ratana ; Samanatissa ; Dhammánanda ; Atthadassi ; Sumanasára ; Sumana ; Guṇaratana ; Jinánanda ; Dhammānanda ; Dhammárāma ; Dhammatilaka ; Siri-Sumana ; Paññāsára ; Dhammakkhanda ; Sóbhita ; Suguna ; Ratanapála ; &c., &c. Some of them are coined, whilst others, like Siddhatta and Ráhula, are those which are found in books. The following passage extracted from the *Buddhawaṇsa*, shews the origin of the word *Ráhula*, which does not signify "eclipsed," as hinted by Mr. Stark.

තස්මිංකලෙ රුහුලොතා පුත්තං විජාතානිපුත්තවා සුඛෝදනමතාරාජා  
 පුත්තස්සතුච්ඡිං පච්චිද්ධාතිකාසකං ජෙස්සසි ඛේඛි සතෙත්තංසුත්තවා  
 රුහුලෝජාතො ඛිත්තංජාතන්ති ආභරාජාජිලිමේපුත්තෝ අවමානිපු  
 ච්ඡිත්තවාතං වමනංසුත්තවා ඉතොපච්චිතං. මේතස්සාරාසුල ඤාමොස්ස  
 චෙවමොතුතිආය.

That is :—

"At this time, Suddhódana heard that (Yasódará) the mother of Ráhula, had given birth to a son ; and, desirous of gladdening his son, sent him a message (to announce the event). The Bódhisat, on receiving the announcement, exclaimed, 'A *Ráhula* is born !' *A tie has been created !* When the king, having inquired what his son had said, was informed of (*taṇ wachanaṇ*) that word (i. e. *Ráhula*, the chief word of his son's exclamation,) Suddhódana said 'Let then *Ráhula* (prince) itself be the name of my grandson from henceforth.'"

The names which are used by the laic as terms of address towards the elders of the Buddhist church, are generally those given to their native countries ; as for instance *Miripenné*, *Karagoda*, *Bentoṭa*, *Ambagahapitiya*, &c., &c. The titles which

were anciently given by the Crown to a chief hierarch of the Buddhist church was *Sanga Rāja*. (See an instance of this in the extracts in my "Sīdat-Saṅgarāwa," p. ccxxvii.) But, when the Singhalese Government had ceased to exist, the dignitaries of their church were designated *Nāyaka* and *Anu-nāyaka* ("the chief" and the "next chief") with the honorific affix of *Terunnānse* or *Umnānsé*.

Treating of the word ප්‍රභූ, says Mr. Stark :—

The word is not used however to any other than such priests (a *Théra*). It is not given to *Kapuwā* or god's priest; nor to the *Yakadurā*, or devil's priest; nor to the *Balikārayā*, or planet priest."

He is quite right. No respect whatever was originally shewn to the priests of a worship which had not the sanction of Buddhism. Thus a "devil's priest" was called *Yakkha-dāsa* (Pāli), or *Yakdessā* (Singhalese), "the devil's slave." But, as corruptions crept into the religious worship of the Island, from the invasions of Ceylon by the Malabars,\* and Yakka worship was gradually introduced by them, 'the slave of the devil' became *Yakadurā*, or 'the teacher of demonology': and the simple *Kapuwā*† 'god's priest,' was designated '*Kapurāla*.' Even here the reader will observe that the honorifics used are such as do not convey much respect towards the professors of the new faith.

The aversion which the Singhalese anciently felt to demonology, and, consequently the contempt with which they regarded the professors of that faith, viz., the *Āṇḍi* Fakirs, who were at one time the pest of Ceylon, may be easily gathered from the *Āṇḍi māla*, a book written with the pro-

---

\* See Mr. Silva's Essay in Lee's *Kibeiro*, p. 274, *et seq.*

† This word is derived from කපා *kepa* 'to set apart,' 'dedicate'—it being usual, when a vow is made to the gods, that as an earnest of one's obligation, or the assurance of the fulfilment of one's vows, to plant a pillar, as it were the foundation stone of the buildings to be thereafter erected for the ceremony. Whence this pillar is called කප *kapa*, and the priest who plants it is thence designated කපුටා *Kapuwā*.

fessed object of alienating the affections of the misguided natives, who had evinced an attachment to a Pretender to the Siphalese throne; and of denouncing the faith which he professed. The writer in reference to the Pretender says that 'it would be far profitable to give to a dog that which is in vain spent for *Wilbdwa*, the devil's slave' &c. :—

විල්බාච්චියන්දෙස්සාහට වාඩනාතුටුම දෙතදේ  
බිල්ලෙක්කට දුන්නොත් සොදසිතෙස් දඩයන්කරදේ

And after an immense deal of reproachful language in respect of the religion which his hero professed, the writer thus expresses himself as to the different merits of the worship of Buddhas, gods, men, and devils.

බුදුන්වාදමොක්සුරපාතුමෝතිරාදුකකටපත්කෙතෙක්කා	ත
නිතින්දෙවියන් වාදපුච්ච දිභුවාමිස පාරදුමෝ තා	ත
රජුන් සේවසකරමෙතරලොව දිනුමොත්ආත පාරදුමොත් ආ	ත
සතුන්හටපිදුකෙතෙක් දෙලොවම පාරදුමාමිස දිනුමොත්	ත

"Those who worshipped Buddha and reached the city of Niwan, have never fallen into Hell: those who worshipped and offered unto gods have never failed their reward: those who served man (kings of this world) have had their reward both good and evil: but those who offered unto devils, were ever lost both in this as in the next world; and was never benefited."

Another class of terms of address to which reference is made are "household words"; and Mr. Stark thinks that they are "generally of a common character, and not words of affection or endearment."

Not so. The terms of endearment amongst the Siphalese are nearly as many as those of honor and rank. Take for instance the epithets for "woman," neglected and degraded woman. She is *sonduru* or *vami*, expressive of what Milton describes her to be, the

—"fairest of creation \* \* and best."

She is *vati* 'wealth,' or 'life of man,' tantamount to the

expression "the better half," as when Milton describes her to be,

"Part of my soul, I seek thee, and thee claim  
My other half,"——

Other terms, like those which Mrs. Malaprop thinks, 'profane expressions of endearment,' are not wanting amongst us; but with them, we have no concern here. I may therefore pass on to different other terms by which woman is designated. She is *pamá* 'the tempter;' *sanda* 'moon-like beauty;' *piya* or *kama* 'the darling;' *vilasi* or *kata* 'the very delight of man.' I am free to admit that the Singhalese, like other nations, have not failed to notice the frailty, the weakness, and the timidity of woman; and to coin words expressive of such qualities. The word *biri*, (බිරි given by Mr. Stark, being the classic form of the same word,) indicates the timidity of her mind, as *tunu-anga* expresses the weakness of her frame; and *liya*, 'winding shrub,' signifies her dependence on man, like

—— "the woodbine, the sweet honey suckle,  
Gently entwist, the female ivy so,  
Earrings the barks fingers of the elm."

If in this respect the Singhalese may be accused of want of gallantry, it is, I apprehend, a charge to which they subject themselves in common with the best and most enlightened nations of the West. The reader will find a precedent in the line where Ovid makes Hero write to Leander, thus:—

*Ut corpus teneris ita mens infirma puellis.*

In a country where the natives closely imitate the manners of the dominant race, one may naturally be inclined to expect that English epithets of endearment are generally used by the Singhalese. In my varied intercourse with my countrymen, I have, however, not known more than one instance of the kind, and that confined to a dashing young fellow who had been the domestic servant in an English family. It is possible, nevertheless, that there are other instances of natives using English household terms of endearment; but I may venture

to assert that the practice is not general, and that it is not likely to be so hereafter. In the instance\* referred to by me above, the words used were "my dear." A person who proved the fact gave it as "*dio*"; and between the ignorance of the witness, and the dulness of the Interpreter, a new word appeared; and the Judge took it down "*bui*"—a fact which moreover shows that the natives are not familiar with such terms.

I have considered the titles of address given to males. It may be convenient here to enter into an investigation of those usually applied to the female sex.

A Lady of distinction, such as the wife of a Mudaliyár, is *වැව්වෙහෙමුදුරුවෝ* or *වැව්වෙහි පාමිනිකා*; she is sometimes addressed by equals *වැව්වෙහෙත්මයා*, *ලමාචනි*; or *ලමානි*. A lady who is a grade inferior to the last receives the title of *කාමිනි*. It is however the usual address of the wife of a Muhandiram or Appuhami, and of the unmarried daughter of a Mudaliyár. *ලමාකාමි* is the title of an Árachchi's wife, whilst *මහත්ම* is that of the wife of Kangany, Vidána or Gamarála; *කාමි* is the honorary designation of a respectable Vellála female of the lower classes. It is sometimes assumed by males of the same standing in society as the females last mentioned, especially in the Southern Province; but it may be observed that it is a term more appropriate to a female.

In the Kandyan Provinces *කුමාරිකාමි* is the highest title of a lady of distinction, second only to a *කුමාරි* or Royal Princess. *මහත්මයා*, "Her Highness" is the feminine form of *මහත්මයා*, which Mr. Stark says on the authority of Clough, is equivalent to "Mr." The former may therefore be regarded as equal to "Mrs.," and is only applied to a gentlewoman; whilst

---

\* No. 35,800. District Court of Colombo, South, before Judge Langslow, for compelling Defendant to marry Plaintiff—a witness stated: "the defendant addressed the plaintiff 'Ado Hámi,' she him "*Pillai*;" and when she called him so, he called her "*bui*" (*Dear*). I believe them to be very endearing terms."—See Judge Langslow's notes of the evidence.

මහන is decidedly the designation of the plebeian female. මැණික් which means, literally, “gem,” is the term for “gentle lass,” although it is frequently used towards those who have attained a good old age. This last term which had once fallen into disuse, is again current throughout the low country, and it is applied in the same manner in which it was originally done, by being applied to the ladies amongst the Singhalese.

The above are the honorary titles of the *Vellāla* caste, all other castes being entitled to different other designations, such as කුඩිපෙර and කුඩි, the wife and daughter respectively of a ‘smith’; පිළි ‘washer woman,’ &c. &c.

My limits forbid my entering more deeply into the subject than I have done. I shall therefore proceed to notice a few other matters of interest, to which Mr. Justice Stark alludes in the essay to which I have so frequently referred. Of these, the terms by which Kandians designate their children as to size demand attention here. Mr. Stark notices only two, *loku* and *tikiri*, whilst there are no less than five words which convey the respective ages of children or persons in a family. Thus, *loku* is the ‘eldest’ of a family; *meḍḍuma* or ‘middle’ is the next in gradation or age; *kuḍā* indicates ‘small;’ *tikiri* ‘smaller’ still; and *punchi* the ‘smallest’ of all. In the maritime country, however, *tikiri* is not used; and *ebittayā*, a term peculiar to the low country, is a ‘bit-boy,’ as applied to *baba* or ‘baby,’ smaller than *punchā* or ‘little one.’

The Pāli or Tamil word *aiyā*, probably derived from the Sanskrit *ārya*\* “the respectable,” is found in the Singhalese; and is used by us to signify ‘elder brother’; and *akkā*, which is a Sanskrit word for “mother,” is adopted in the Singhalese to designate ‘elder sister.’ The use of these terms denote the great respect with which the elder members of a family are treated amongst the Singhalese; and it is well known that elder brothers and sisters amongst us are never mentioned or called by their proper names. When the terms *aiyā* and *akkā*

---

\* See Pr. Wilson’s *Hindu Drama*, vol. I., p. 113, note.

assume a more endearing form, they are expressed *aiyandi* and *akkandi*; and the same termination (*andi*) is employed when speaking of a mother respectfully, as *ammaandi*. The termination, in a similar application of the words *appá*, 'father,' and *bála-appá* or *báppa* 'uncle' is *chchi*, as *appochchi*, *báppochchi*.

As the above are nominal terms of address peculiar in their use and application, so there are also nominal terminations and verbal affixes in the Sinhalese, to which I shall allude here. Of nominal terminations, I may mention a peculiarity which is not generally understood. It is in reference to the use of names without honorific affixes. When persons address each other without honorifics, they change the terminations of the name from one vowel sound to another. They do so with a view of conveying respect. Thus for instance *poḍḍá*, 'little one' is changed into *poḍḍé*; *Justiná* to *Justiné*; *Cornis* to *Cornisé* &c. Though the latter is the vocative form of the noun, yet that form is adopted in the other cases also, with a view to honor the person spoken of. Where, however, no respect is intended, the proper termination of the name is alone retained.

There are several verbal affixes. Of them, *ඤාන ඤාන* *aññá* denotes the highest respect, as in the passage *සෙසෙයාටත් තඤ්ඤාදායකඤ්ඤා ගණප්පාදායකඤ්ඤා*. So does *මැනව* *menawa*, as in the Lord's Prayer, 'Give us this day our daily bread.' *අපේදවස්සකා භෝජන අපටඅදදුනමැනව*.

Speaking of verbal affixes in the imperative mood, to convey various degrees of respect to the person addressed, I shall here exhibit a few of the changes which one solitary word undergoes, when applied to different persons. Take for instance එන 'to come :

- |   |             |     |                                     |                       |             |
|---|-------------|-----|-------------------------------------|-----------------------|-------------|
| 1 | දේවනාථවහන්ස | ... | to kings                            | ...                   | අවමැනව.     |
| 2 | හාමුදුරුවෝ  | ... | to noblemen                         | ...                   | සැපයවෙන්නව. |
| 3 | හාමුදුරුවෝ  | ... | to Priesthood...                    | වඩින්නව or වැඩවකරන්නව |             |
| 4 | උන්කාගේ     | ... | { to a Sámanéra }<br>{ by a Théra } |                       | එනවා.       |

5 හමුත්තාන්තේ	...	to equals	...	ආවොත්.
6 බන්ධයි	...	to inferiors	...	ඵන්ධයි.
7 මහත්මයා	...	{ to a gentleman or an equal, respectfully, or husband.	{	ඵන්ට or ඵන්තට.
8 රාලායාමි	...			ඵන්ටකෝ or ඵන්ටා
9 තමුණේ	...			ඵන්ටාකෝ.
10 කුඩ, උඩ	...	{ familiarly	{	වරෙන්,
11 බොලන්	...			වරෙන්කෝ.
12 මයි	...			ඵන්.
13 අබෝ	...	{ to menials or low caste per- sons.	{	වර.
14 හන්	...			වරෙන්,
15 බොල or බොලන්	...			වරෙව්වෝ.

In reference to the variety of expressions used amongst the Singhalese, the following extract from my “*Sidat Sangarā*,” p. lxiv., may not be out of place here.

“There are numerous words in the Singhalese which are used towards particular classes of people, e. g., වැඩමකරන්ට ‘proceed,’ is a term peculiar in its application to the priesthood, whereas ගහපත්වෙන්ට, of the like signification, is applied to the nobility, and යන්ට, පලයන්, පලයන්ධයි, පල to equals and inferiors of different grades. So likewise වලඳන්ට ‘eat’ is applied to priests සරපායවෙන්ට to nobles, කන්ට to inferiors; and the last, with different modifications, such as කාපන්, කන්ටාකෝ කාපන්, කාපන් ඩයි, කා, කාපය, to equals and inferiors.”

So various are the modes of address, adopted by the Singhalese towards particular individuals, that the simple ඔවු ‘yes,’ used in familiar intercourse, is changed into ඵකයි, when the nobility are addressed; and into ඵකෙයි, when the priesthood. The simple හා ‘no’ becomes බෝයි, under similar circumstances; and හොඳයි ‘good’ is changed to ගහපති and හොඳෙයි.

Having thus considered the principal matters to which Mr. Stark has attracted attention, I shall in the next place notice the “modes of reverence” referred to in the following paragraph.

“There are several modes of reverence or obeisance among the Singhalese :—  
The shoes also off: placing the right hand on the breast, and bowing; joining the hands, raising them thus to the forehead, and bowing; falling on the knees, and so doing; and prostration on the face upon the ground.”



No native of the lower orders ever thinks of entering a *walawwa* or "mansion" of a nobleman, without first leaving his slippers at the gate. This is an ancient custom in the East, which was enforced by Europeans for a very long time. Bennet, in his work on Ceylon, (p. 100,) notices a decision of Government\* respecting the assumption by natives of shoes and stockings, which they did to avoid being obliged to leave their slippers at the gates of gentlemen whom they visited; and we know of instances in Colombo, where natives of the highest families were refused admission into European houses, because they departed from the ancient custom of leaving their slippers at the door. But, happily, the time are changed! We perceive a great social change in the conduct of Europeans towards natives. From the adoption of English customs we augur happy results, amongst which (although the remark may excite a smile in certain quarters) I may almost predict, the abolition of caste-distinctions and class-prejudices. To proceed:—However stringent was the original custom in regard to going barefooted in the presence of the nobility, there

---

\* "Mr. John Brixius De Zilva, the present assessor of the District Court of Galle, .....who wore shoes and stockings in Court with my unqualified approbation, was refused admission into the Kachcheri with such European appendages. That gentleman felt that, as a British subject, he had as great a right to wear shoes and stockings as those who were of European birth; but as the Collector chose to make a reference to the Governor, which was followed by the most extraordinary decision, that '*His Excellency would not sanction the adoption of the most comfortable portions of the European and Native costumes; and that the Interpreter must choose one or the other*;' Mr. De Zilva relinquished his visits to the Kachcheri, rather than the comforts of his adopted dress. A writer in the *Calcutta Review*, December 1849, p. 381, defends the policy of a similar decision in India; but the reader will perceive how different are the costumes of the turban-clad Hindu, and the comb-wearing Sihaliese, and therefore how very inapplicable are the writer's remarks to Ceylon, even if they can be justified upon other grounds: "How much excitability, for instance, has been shewn (says the writer) in respect to what has been called 'the shoe question.' Taking off the shoe or slipper, was no custom introduced by the English. It was, and has been, the established custom of India for ages. If the natives of India claim a conformity to our customs, let them have it by all means on equal terms. Let them have their purgris or turbans in the ante-chamber. A native of whatever degree is perfectly well aware that he cannot call upon a native of high rank, without submitting to his country's etiquette; and he will conform to it without a demur, though he grudges to do so to an European of equal rank. The Bengalis are the only natives (and only a small section of them) who object to it. Why they do so object we never could comprehend. The Greeks, a far more independent, polished, and intellectual people, always left their slippers in the lobby."

seems to have been but little distinction in the forms of salutation. According to these forms one is entitled to be saluted (except he be a very low-caste person) in the same manner that he salutes his host; for, in the modes of saluting, by clasping the hands, there is no distinction between the noble aristocrat and the humble plebeian. The etiquette amongst the Siphalese is, that a female ought to raise her hands to the forehead, whilst it suffices if a male should only lift them up so high as the tip of his fingers might reach his lips. In the Galle District, it is a serious offence not to return the salutation of a person; and so scrupulous are they in this respect, that the late first Mahá Mudaliyár, Illangakón of Má tara, never failed to return the compliment to all the Siphalese who paid him the respect by bowing with an *éndili*,\*—by which is meant the obeisance made by the clasping of the hands together. Of course he never raised his hands to the face when a *Paduwá* or a *Berakárayá* was the saluter; but even in the case of such persons, he, as is the practice in nearly all the parts of Ceylon where ancient customs are strictly adhered to, made an inclination of his hand or hands, as the case may be, by raising them up in the form of a semi-Salaam of the Hindus. With regard to others of inferior classes, no distinction is ever shown by those who correctly understand the etiquette on the subject. A Buddhist priest, or Buddha is to be worshipped *pasaṅga pihiṭuwá*, (පසංගපිහිටුව) as we read in innumerable passages in the Buddhist scriptures, that is, by touching the ground with five parts of the body of the saluter. This is difficult to be explained without a representation; but if the reader will only fancy a person falling down on his face,† and then lifting up the body supported by the forehead, the two elbows, and the knees—and then putting his clasped-hands to the forehead, he may perhaps get some

\* In the *anjali* (Sanskrit) or respectful obeisance, (says Professor Wilson), the head is slightly bowed, the palms of the hands are brought together, and raised literally to the middle of the forehead, so that the tips of the thumbs only are in contact with it. *Hindu Theatre*, Vol. II. p. 108.

† “I fell at his feet to worship him.” Rev. xix. 10.

conception of a person prostrating in the manner indicated by *pasanga pihiṭuwá*.\*

It is pleasing indeed to see well trained natives make the usual salutation between man and man; for they do it in as graceful a manner as a Frenchman makes a bow. On the contrary, nothing can be more offensive to the sight than the half-English and half-Sinhalese salutation of some, the *nolens-volens* nod of others, and the ill-looking bow of that foreign people whom a Gajabáhu made the settlers of the Alutkúru Kóralé. Like their outward forms of salutation, their language, too, is a mixture of Sinhalese and foreign idioms, and is different from that spoken by the real descendants of the Sinhala race.

Amongst the Sinhalese, a present of some little thing, when made by an inferior to a superior, is considered as a high mark of respect; and to refuse it is to insult the donor. The Natives usually take forty leaves of betel, as the *drghya*† of our Hindu neighbours, on visiting their chiefs. A "pingo," or *kada* or cakes and fruits is not unfrequently presented; and this is ornamented with white tender leaves of the coconut palm. Amongst equals, presents are exchanged as a mark of attention; and, if from a low-caste man, one of a higher caste receives a favor, the latter shows his respect by visiting the former with a pingo, which he takes no farther than the stile of the low-caste man's garden.

Whilst it is a fact that all classes reciprocate the common courtesies of life, it is also a fact, and one worthy of attention—that the Buddhist priests, who receive the homage of the laic, never return the obeisance of any one.

\* This is the same form of "worship," which the Rev. Spence Hardy in his *Eastern Monachism*, p. 25, describes as being performed, "with his forehead to the ground, and touching the ground with his knees and toes." But Mr. Hardy is wrong in saying that the "toes" should touch the ground. For "toes," read "elbows."

† "She comes with an *drghya*, a present indicative of respect to a superior. It matters not of what it consists."—*Wilson's Hindu Theatre*, I. p. 312.

This is, perhaps, from a notion that as a "son of Buddha," and indeed, one of 'the three gems of adoration,' the priest is entitled to the same reverence,\* which Buddha exacted from all beings. For, it is stated by that sage, in his first discourse in the *Pārājikā*, on being remonstrated by Véranja against what he considered an unjustifiable departure from decorum and propriety on the part of Gautama, by not reverently saluting venerable Bráhmīns; such as the aged, the honorable, the experienced, and the far advanced in life—that there was not a single being amongst Bráhmas, Gods, Sramāṇas or Bráhmīns in the whole universe of the Bráhma, the Déwa, and the human worlds, whom he should reverently salute, in whose presence he should rise, or whom he should invite to be seated.†

The scriptures, too, receive the same reverence from the votaries of Buddha, which they pay to the priesthood. For, as Mr. Justice Stark properly observes "the *Játaka-pota*, or the Book of Incarnations is styled *Játaka-pot-wahansé*." As to the respectful posture in which the scriptures should be listened to, it is stated in the *Lówēda-saṅgrahaya*, that "one should neither sit on high whilst the *baṇa* is read on the ground, nor stand up whilst it is read on high."—

උබ්බද්ධිමතිබ්බසාසනසේන  
විමැතිවඋබ්බද්ධිබසාසනසේන

The Rev. Spence Hardy thus notices the subject, in his work on *Eastern Monachism*.

"The Sramāṇa receives worship from the householder, and he forms part of the Saṅgha, in which all Buddhists profess to take refuge, when they repeat the three-fold formula of protection. The priest never make obeisance to any one, and never pay any outward mark of respect. In the books, they are represented as using the word *tó*, a form of the

---

\* "The protection of Saṅgha cannot be received by any one who sits near a priest without permission."—Hardy's *Eastern Monachism*, p. 210.

† The habits of the Sīghalese in respect of the outward marks of respect and attention to Superiors, accord with those of the Hindus; as enjoined by Manu in his Institutes, ii. § 185.—See also, *Tr. Asiatic S.* iii. p. 198., *et seq.*

second person singular that is offensively low, when addressing Kings, or even deities; all other persons use the honorific form of the *ve:b*. when addressing them, but they never use it in return; they receive honor from all beings, in all forms: but they never give it to any being in any form."—p. 414.

Mr. Hardy is substantially correct in what he states in the above extract; but the remark respecting *තෙ* *tò*, as being the pronoun used by the priest to the layman, requires qualification. It is possible that this "form of the second person *singular*," occurs in books translated from the Páli into the Sinhalese; but I have never met with a single passage in any original Sinhalese work in which a priest is made to address a laic, much less a King, or a God, with a pronoun "that is offensively low." The word that I have always met with in my reading, as the pronoun used by the priest to the laic (except indeed where the Páli *තවං* *twan* is rendered literally into Sinhalese) is *තෙපි* *tepi* or *තෙප්* *topi*, the form of the second person *plural*, which I need not inform the reader, becomes like other terms of address when used in the *plural* form, an honorific.\*

I shall content myself with five examples:—

1. In the *Attangalu-Wappa*, Nanda Mahá Théra is made to address his royal pupil, Siri Saṅgabó, who was also his nephew, with *තෙපි* you thus: ඉක්කිත්තෙන් එක්දවසෙක එ කුමාරයන්ගේ මසිල් කැපුමකෙරුන්නාන්ගේ වැඩිවියපැමිනි සිරිසකබ්බිකුමාරයන් පිරිත්බැණ්බණ් ඇසූ අත්තකෙහි හිදවා මෙසේ වදාරනසේකි, මහත් සාහස ඇති කුමාරයෙහි දැන් තෙප් දන්නාලද බොබාගම ඇත්තෙහිවිය දන්නාලද සිසු බාහිරාශාන්ත්‍රඇත්තෙහිදවිය...ඇ. "Afterwards, one day, his uncle Nanda Mahá Théra recited *pirit* to Prince Siri Sangabó, who had attained his majority; and, after he had heard *bana*, addressed him as follows: 'Most noble

---

\* The plural form of the second person may be properly used with the epithet. 'Lord,' 'Master,' &c. e. g. කොමිනි කොපි නික්වලු ප්‍රභූ ජීවිතකු ගෙන් ලද්ද, කැපුමකම තෙපිද ව්‍රිතමයකම තෙපිද. 'My Lord (addressing Buddha) did you (කොපි) obtain this unshaken firmness from the god. dess of earth? Are you Sakra? Are you Brahma?—*Srwajna-guṇḍaṅkara*.

Prince, you (කෙළ) have now mastered the Buddhistical doctrines, and also the inferior arts and science,'” &c.

2. The same prince having afterwards refused to assume the reigns of Government, is thus addressed by the *priesthood*, upon the earnest solicitations of the populace :—

කෙළි කරණලද යුගල් ඇත්තෙහිදවය, &c.

“There is much merit that you (කෙළ) have acquired,” &c.

3. King Milindu is thus addressed by Nágaséna théra in the *Milindapprasna*; and this be it remembered is like the last, a translation from the Pali :—මහරජානෙහි කොපතෙවනාහි උපන් යුවර කොතැන්හිදැයි විමාලුණෙක. “He inquired, ‘Monarch, where is the city of your (කොපතෙ) birth,’” &c.

4. In the *Thúpawansa* the priest Maha-sup is represented as speaking to King Ajátassatru thus : මහරජදානානගෙහි ධාතුත්වතත්තේට තිඤ්ඤාත්වසිත් උපද්වපෙනෙයි එවන උපද්ව වල කහුසදහා කොපවැනි ඉඩ්ඤ්ඤාත්වන රජුන් ඇතිකල්හිම එකධාතුහි ධාතූන් කරවනබව වටහෙන්නයි වදාලුණෙක. “He said, Monarch, danger is to be apprehended in future to the venerable relics, from (the malignity of) heretics. It is as well, whilst there are kings eminently faithful like yourself (කොප) to make a depository of relics with a view to avert the danger.”

5. Maháséna, a God of Swarga is addressed by Assagutta théra with *tepi*, in the following passage in the *Milindapprasna*:—එබ්බ නිදුක්වු මහාසේන දිව්‍යරාජයානෙහි මේසදි වාලෝකය සහිතවු මහස්සලෝකයොහාරම දිවසින්වලන්තාවු අපි මිලිදුරපුරුවන්ගේ නපුරු වාදය බිදහැර බුබුසුන්ගේ සංග්‍රහකරන් හට සමථිකෙතෙක් කොපහැර යුද්ධමිත. “Hail your divine Majesty Maháséna; we who always behold with our divine eyes these six heavens besides the human world, have failed to perceive any one besides yourself (කොප,) who is able to defeat King Milindu in his artful dialectics, and thereby to nourish the religion of Buddha.”

I have already made a passing allusion to අයුබෝවන් *dyu bōvan* “long life,” as a term of greeting amongst the Singhalese. I may here also mention that we use another term which is

ආයුරක්ෂකරාදේව *āyurakṣhākara dēva* "may your life be preserved;" and it is not unusual amongst us to bid one—*subagaman*, which literally means "fare-well." The usual mode of taking leave amongst the Sinhalese, is by asking *awasara*, "leave"—although amongst equals we frequently say, මම ගොස් එනෙමි *mama gohin eññā* "I shall go and return," quite different from the Tamil *vārum*, simply, "I will come."

With the above my observations on the forms of salutation and modes of address amongst the Sinhalese, terminate; but, before I conclude, I cannot forbear making a few remarks on what Mr. Stark considers the connection between තිල "the royal colour," and "the title of the great."

"*Nila* was thus perhaps what may be called the royal or government colour, and words of that formation may be so derived. There was a තිලමේ *Nilamē*, at the head of several of the departments. It was the title usually given to any high official, and it is still the title of the great officer of government in the temples.

"The term in question may, I conceive, be so rendered accordingly. Thus when the valiant G-ja-bāhu Rāja, whose city (unlike the banquet house of a great king as his ministers ignorantly represented) had been entered by an enemy, and many captives taken, at length resolved on an expedition for their recovery, he went out from the council with *Nila Yōdayā* (තිලයෝදයා) the great officer of war. These words, however, have been rendered 'Nila the giant,' and 'the great giant Nila,' as if තිල (*nila*) were a proper name, and not like තිලය (*nilaya*) and තිලතල (*nilatala*) an office, place or situation."

There is no more connection between *nila* as a 'colour,' and *nila* as an 'office,'—than there is between *nil* as the verb, "to be unwilling," and *nill* as the noun which signifies "the shining spark of brass in trying and melting the ore." Nor is the appellation of Gaja Bāhú's giant, who accompanied him on his expedition to the Sólían country, derived from *nila* (blue colour,) any more than is the *Nila Purāna* of the serpent God,\* or the great *nila*, that lofty and sacred mountain

---

\* See Asiatic Researches, Vol. xv.

of the Rámáyana, whose summit was of pure and bright gold.\*

As respects colour Mr. Stark adds :

“The great colour was නිල (nila) the colour of the sky and ocean, and like these, indeed, susceptible of many shades from green to dark blue ; but commonly denoting this last, the colour of Vishnu's garment. It is to this colour allusion is so often made in the descriptive writings of the Singhalese poets ; as when they sing the praises of feet, soft and beautiful ‘as the full blown lotus.’

කොමලපුප්පිසරදිසාපද.

“So also when they speak of ‘lotus hair,’ and the නිලංකාර (nilaṅkāra) or blue ornament of dark eyes.”

The Singhalese are, doubtless, great admirers of *blue* as a “colour;” yet it is not to that colour which allusion is so often made in the descriptive writings of the poets, as supposed by Mr. Stark. When in singing the praises of the feet, the poet compares them to කොමලපුප්පිසර “the full blown tender lotus,” he only compares them to the broad formation, and the tenderness, of the flower—by no means intending to convey its colour. For *sara* as a name for the lotus, is a *generic term*. It may either be the *white* or the *red* lotus : but it never signifies the *Nelumbium speciosum*, which is distinguished by *nilupul* ; as when we speak of a *nilupuleṣi*, ‘blue-lotus-eyed,’ a term for ‘woman,’ expressive of her beauty as ‘belle,’ is in English. The hair, it is true, is compared to *blue* objects, as the tail of a peacock, and sometimes to *green* objects, as the *Valesnaria octandra* ;† but never, as I apprehend, to the *lotus* : and the reason for this, (what may seem to be a strange comparison) is—not that *nila*, “blue,” is considered to be a “great,” “government,” or “royal, colour” ; but that the Singhalese did not anciently draw a distinction between *green*, *blue*, and *black*. Thus, when we say, නිලංකාර

\* The fact however, that one and the same word can in the course of time assume various forms for various objects, proved as it is by numberless examples, requires no further support.—Bopp's Comp. Gram., p. 16.

† See my Sidat Sangará, Note Ap. p. xcvi.



in respect of our eyes, we do not mean, "blue ornament of dark eyes," but simply the darkness of one's eyes, or the dimness which one feels on getting a fit of fainting.

But Mr. Stark is right when he understands the phrase ලුටකමර *lotus-mouth*, as referring to "red lips;" for it is remarkable that whilst western nations sing the praises of the *lips* signifying the mouth, in a limited sense; the orientals speak of the *mouth* in a like sense to signify the lips. මර is specifically the "red lotus," and in comparing the mouth to that flower, we only convey the redness of the lips, as the English bard conveys the same idea, by referring to *Coral*. Speaking of *tumbara*, Mr. Stark thinks that "it might well give occasion to the same name as a designation of the Island, තම්බපරණි 'Tāmbraparṇi,' red leaf, whence the classic appellation for Ceylon, *Taprobane*."

The origin of this word is no longer a matter for speculation. It is well known that it is derived from *Tambavanna*, "copper colour,"—that hue which seems to be held so sacred amongst the Hindus, that, according to the institutes of Manu, (Cap. iv. § 130), it is an offence to pass over even the "shadow of a copper-coloured man"; but I am glad of the opportunity thus presented, of correcting an error into which the learned translator of the *Mahāvāṃsa* has inadvertently fallen.

Dr. Mill, in recording his opinion on "this most authentic History of Ceylon"; says, in the *Bengal Asiatic Society's Journal*, for December 1836:—

"This real origin of the celebrated name *Taprobane*—(whatever may be thought of the story connected with it in the *Mahāvāṃsa* and which may seem with greater probability to have arisen from the *Tamra-varna*, or copper colour, of its southern cliffs near *Matura*, so well known to Navigators—is one of the points of curious and interesting information which we owe mainly to this publication of Mr. Turnour. Whatever had been before suggested on the probable origin of that name, so little now known except in these Buddhistic Books, as one of the proper names of the great island of *Lanka* or *Singhala-dwipa*, was in the highest degree forced and improbable (e. g. the Hind. *Tapuvi-Raban*; or 'the Island of *Ravana*':)" —p. 830.

Now Dr. Mill was quite right in thinking it was more probable that this name was derived from *tāmra-varṇa* (which is *tamba-varṇa* in Pāli) “copper colour,” than from *tamba panniyo*, “copper palmed,” given in Mr. Turnour’s version of the Mahāvaṇsa. For, it appears that Mr. Turnour has fallen into this error by taking the text to be *Tamba pannattha panniyo*. And although he has corrected the text in his *Errata*, by giving as the correct word *Tambavanattha pḍnayo*, he has, nevertheless, failed to rectify the error in the Translation,—an omission by which he has permitted the passage to remain thus :—

“At the spot where the seven-hundred men, with the King at their head, exhausted (by sea sickness, and faint from weakness) had landed out of the vessel, supporting themselves on the palms of their hand pressed on the ground, they set themselves down. Hence, to them the name of Tambapanniyo (copper-palmed, from the colour of the soil. From this circumstance that wilderness obtained the name of Tambapanni. From the same cause also this renowned land became celebrated (under that name.)—*Mahāvamsa*, p. 50.

With all the deference due to the memory of so distinguished an Orientalist as Mr. Turnour, I venture to offer the following translation :—

“The seven-hundred men, with the king at their head, who had come from thence, landed out of the vessel, exhausted and faint from weakness ; and sat themselves down by pressing the palms of their hands on the ground. Whereby their palms became (*tamba-varṇa*,) copper coloured. From this circumstance that wilderness obtained the name of *Tambapanna* ; and from the same cause also this renowned land became designated by that name.”

The Tīkā has the following explanation, to which we append a Translation ; and it fully bears out the correctness of the text and the conjecture of Dr. Mill.

Tambapanni yatō ahūti—yatō, yaśmā tamba bhūmi-rajēhi phutṭhatta tēsanpāni tambawanno ahōsi; tatōtasmā sōpadésōcha ēvasuddēna gaḥīta-metta nagarancha ayan dipōchati imē sabbē tambapānina makā ahēsunti atthō.

That is :—*Tambapanni yató ahúti*, &c.—signifies “ Since by reason of touching the dust of *copper-coloured* earth, their palms became *copper coloured*; by reason thereof was this province, the city (built therein), and this Island, designated *Tambapáni*,” &c.

Having thus ascertained the origin of this classic appellation for Ceylon, I purpose, before concluding, to advert to an important topic suggested by the following remarks on the subject by Dr. Mill :—

“ Whenever corresponding words in the *Páli* and *Singhalese* occur, as they do every where, I believe it will be invariably found that the *latter* (the vernacular words of the people of the Kandian and Maritime provinces of Ceylon), *resemble most closely* the Sanskrit original of both:—whereas the former, the sacred language, takes in all words that admit of it, the same sort of peculiar variation which belongs to the tongues of northernmost India,—showing evidently that it was *thence*, and not from *Ceylon*, that the peculiar language as well its institutions of Buddhism came to the Island,—as the *Mahawansi* itself distinctly asserts. To take but one out of the many instances that might be alleged, we may give one of the most remarkable and early names of the Island, viz. *Tambapannyo*, as the *Páli* name is given in p. 35 of this specimen of the *Mahawansi*, viz. the “copper-palmed;” in Sanskrit *Tamra-pṭni*. Now this Sanskrit form, so different from the *Páli*, is actually the present *Singhalese* for the same thing, as I was assured by a competent scholar on the Island; and a very convincing proof that it has ever been so, may be seen in the name by which the Island was universally known to the ancients and to Cosmas Indicopleustes when he visited it, viz. *TAPROBANE*. The Greeks would be just as unlikely, to introduce this *r* where it did not exist, as any other languages of India, besides the northernmost ones would be to drop it where it before existed; but this is a universal character of the *Prákrit* and of the present *Hindi*, (as seen in this word, *tamba*, copper, *kám*, “word” for *karm*, &c., &c., &c.)—*Beng. A. Society’s Journal*, vol. v., p. 830.

Without controverting the main position of the learned Doctor, viz., that there was a connection between the History of Ceylon before the Christian æra, with that of Maghadda, or that part of northern India which we now call Behar\* ; I

\* “ Our language furnishes us with strong evidence against the supposition that it belongs to the *Southern* class of languages.”—*Siddat Saṅgará*, p. lvii.

may be permitted to remark that the Singhalese resembles the *Pāli* more than the *Sanskrit*;\* and this is the case not only in respect to the general structure of the language, but in reference to the particular appellation given to this

—— “utmost Indian isle, *Taprobane*.”

For, although Dr. Mill states on the authority of what he regarded a “competent scholar on the Island”—that “the Sanskrit form (*tāmra-pāni*) so different from the *Pāli*, is actually the present Singhalese† for the same thing;” it is nevertheless very clear that the Singhalese word, *Tammana* for the same place,‡ is derived from the *Pāli*, and not from the Sanskrit. From the fact, that this Island was anciently called *Taprobane* by Western nations, especially the Greeks, who, it is probable to suppose, “would be just as unlikely to introduce this *r* where it did not exist, as any other nations of India (besides the Northernmost ones would be to drop it where it before existed)” — a presumption doubtless arises in favor of this name having been of *Sanskrit* origin. But we cannot give much weight to this presumption, when the same facts upon which it is based may render the truth of a different hypothesis probable, viz., that the Greeks, after the Wijayan æra, were indebted for the name to persons who expressed themselves in Sanskrit, or in a dialect of Sanskrit origin.§ For, whilst it is quite clear from the writings of the

\* The Singhalese became incorporated with Sanskrit forms only at a very recent date. See *Sidat Sangarā*, pp. xxx., liii., clxiv.

† In Singhalese historical works, *Tambapanna* is called *Tammana*; See *Rājawaliya*, and Forbes’ *Eleven Years in Ceylon*, vol. I. p. 11. Also Upham’s works, vol. ii., pp. 174-5.

‡ “They returned from their destruction to *Tammana-nuwara*, or the city of *Tammana*.”—*Rājawaliya*.

§ “I am inclined to suggest that the name of *Tambapani*, *Tambapanni*, *Tambrapanni* of the *Pāli* historians, which has been converted into *Taprobane* by those of the Western world, may have had its origin when *Vijaya* and his followers made known their first conquest in Lanka to the race from which he was descended, and from whom he had been expelled.”—*Forbes*, vol. 1., pp. 10, 11.

Greeks, that they were indebted to others\* at a comparatively modern date, (after the Christian era) for the information recorded by them, it is a fact that ancient rock inscriptions, recorded in India by the great Monarch Aśoka (B. C. 259,) contains the name *Tamba-panni*, without the Sanskrit *r*, and in the integrity which it occurs in the Mahāwayasa ;—and this too, be it remarked, in a sentence which gives two Sanskrit names, “*Satiyaputra*” “and “*Katalaputra*”—the Pāli of which would be, *Satiyaputta* and *Kataliputta*. I extract the following passage from the *Girnar Inscription*.†

“Every where within the conquered Provinces Raja Piya-dasi, the beloved of the Gods, as well as in the parts occupied by the faithful, such as *Chōla*, *Pida*, *Satiyaputra* and *Kataliputra*, even as far as *Tambapanni*—and moreover, within the domains of Antiochus the Greek,” &c., &c.

The Siphalese word *Tammana*, clearly bears greater affinity to the Pāli *Tambapanna*, than to the Sanskrit *Tāmbrapāni* ; and this relation may be further illustrated by the greater resemblance between those two languages, than between the Sanskrit and Siphalese. I propose to exhibit this by presenting the reader with a number of words ; and with that object I submit the following observations :—

An opinion seems to prevail that the Sanskrit is entitled to greater claims to originality than the Pāli ; and peculiarities in the formation of the latter language have been exhibited to show that it is a dialect of the Sanskrit, if not immediately transformed from that language.‡ Upon so important and

\* There is a river called *Tambrapani* in the southern Peninsula of India, and it is not improbable that the Natives of India pronounced the Pāli word (*Tambapanni*) according to the peculiarity of their own language, and in accordance with the name with which they had been already familiar, viz., *Tambrapani*.

† Bengal Asiatic Soc. Journal, vol. vii., p. 159.

‡ “From an examination of the structure of the Cuneiform-Persic, and Zendic, the oldest forms of the dialects of ancient Persia, it is evident that both have been derived from the Sanskrit ; the relation which they bear to the latter being analogous to the relation of the Pāli or Prākṛit to the same—of Italian to Spanish or Latin.”—*Journal of R. A. S. Great Britain and Ireland*, vol. xvi, part I, p. 194.

weighty a question—one, on which the learned world is much too divided—it may not be proper to express an opinion without fully entering into an investigation of the subject : nor is it necessary for my purpose to do so here. My object at present is briefly to show the particular relation which the Singhalese bears to the Páli, and to explain that the Sanskrit element in the Singhalese, to which Dr. Mill refers in the paragraph above extracted from his notes, is one of comparatively modern introduction.\* I shall briefly allude to several peculiarities.

1. It is a phenomenon well known, that in many Sanskrit words a *k* is frequently followed by a *ś* *sh*; and that in their corresponding Páli terms, the *ś* is changed into the aspirate of *k*. Thus :—

වෘක්ෂ *vriksha* into රුක්ඛ *rukkha*, 'tree.'  
 ක්ෂමා *kshamá* into කමා *khamá*, 'forgiveness.'  
 දක්ෂිණ *dakshina* into දක්ඛිණ *dakkhina*, 'south.'  
 ක්ෂුර *kshura* into කර *khara*, 'razor.'  
 ක්ෂෙත්‍ර *kshettra* into කෙත්ත *khetta*, 'field.'

On comparing the above with their corresponding Singhalese words, there is clear evidence that the Páli forms are alone changed into the Singhalese. Thus :—

San.	Páli.	Sig.
වෘක්ෂ	රුක්ඛ	රුක් 'ruk.'
ක්ෂමා	කමා	කමා 'kama.'
දක්ෂිණ	දක්ඛිණ	දකුණු 'dakuṇu.'
ක්ෂුර	බුර	කර 'kara.'
ක්ෂෙත්‍ර	කෙත්ත	කෙත් 'ket.'

It is unnecessary to multiply examples; but I may mention the following, which easily occur to my mind ; භික්ෂු, භික්ඛු, භික් 'an ascetic ;' වක්ෂ, වක්ඛු, ඔක් 'eye ;' යක්ෂ, යක්ඛ, යක් 'demon ;' නිව්න, නිව්න, නිව්න 'niwan ;' ලක්ෂ, ලක්ඛ, ලක් 'a lac ;' අක්ෂි, අක්ඛි, අක් 'an eye ;' &c.

\* See my *Sidat-Sangarā*, pp. xlviii, clxxxvii.

2. Another phenomenon to which I shall advert, is, that when the Sanskrit vowel *ri*, which is not known to the Pāli and Sīhalese, is found changed into another vowel in the Pāli, that same vowel is adopted in the Sīhalese. Thus :

San.	Pāli.	Sip.
උජ්ඣ <i>riju</i>	උජ්ඣ <i>uju</i>	උජ්ඣ <i>udu</i> , 'direct.'
මෘදු <i>mridu</i>	මුදු <i>mudu</i>	මුදු <i>mudu</i> 'tender.'
රිෂි <i>riṣi</i>	ඉසි <i>isi</i>	ඉසි <i>isi</i> 'a Rishi.'
රිද්ධි <i>riḍhi</i>	ඉද්ධි <i>iddhi</i>	ඉදු <i>idu</i> * .
ප්‍රිෂ්ඨ <i>prishṭha</i>	පිට්ඨ <i>pitṭha</i>	පිටු <i>piṭa</i> 'back.'
ග්‍රීහ <i>griha</i>	ගෙහ <i>geha</i>	ගේ <i>gé</i> 'house.'
ද්‍රිද්ධ <i>drīḍha</i>	දලු <i>daḷha</i>	දලු <i>daḷa</i> 'coarse.'
කූට <i>kṛita</i>	කත <i>kata</i>	කලු <i>kaḷa</i> 'made.'
හූරි <i>hṛida</i>	හද <i>hada</i>	හද <i>hada</i> 'heart.'
කෘමි <i>kṛimi</i>	කිමි <i>kimi</i>	කිමි <i>kimi</i> 'worm.'
මෘත <i>mṛita</i>	මත <i>mata</i>	මලු <i>maḷa</i> 'dead.'
ශිඝ්‍ර <i>ṣigṛā</i>	සිග්‍ර <i>sigāla</i>	සිවල් <i>sival</i> 'jackal.'
වෘක්ෂ <i>vṛiksha</i>	රුක්ඛ <i>rukkha</i>	රුක් <i>ruk</i> 'tree.'

3. It is well known that the conjunct *r* found in the Sanskrit is frequently lost in the Pāli. When this is the case, the corresponding words in the Sīhalese bear a greater affinity to the Pāli than to the Sanskrit. Thus :—

San.	Pāli.	Sip.
තාම්‍ර <i>tāmra</i>	තම්බ <i>tambā</i>	තම <i>taṃba</i> 'copper.'
වණ්ණ <i>varṇa</i>	වණ්ණ <i>vaṇṇa</i>	වණ <i>vaṇa</i> 'colour.'
කණ්ණ <i>kaṇṇa</i>	කණ්ණ <i>kaṇṇa</i>	කණ <i>kana</i> 'ear.'
පණ්ණ <i>paṇṇa</i>	පණ්ණ <i>paṇṇa</i>	පත් <i>pan</i> 'leaf.'
අර්ධ <i>aṛḍha</i>	අඩ්ඩ <i>aḍḍha</i>	අඩ <i>ada</i> 'half.'
වස්ත්‍ර <i>wastra</i>	වත් <i>wattha</i>	වත් <i>wat</i> 'raiment.'
වක්ත්‍ර <i>waktra</i>	වත්ත <i>watta</i>	වත් <i>wat</i> 'face.'
ඊර්ෂ්‍ය <i>īrshya</i>	ඉසා <i>issa</i>	ඉස <i>isa</i> 'enmity.'
කෂෙත්‍ර <i>kshetra</i>	කෙත්ත <i>khetta</i>	කෙත් <i>ket</i> 'field.'
ශ්‍රද්ධා <i>śraddhā</i>	සද්ධා <i>saddha</i>	සද්ද <i>sedḍ</i> 'faith.'

\* A word signifying 'the power to go through the air.'

San.	Páli.	Sip.
අග්‍ර <i>agra</i>	අග්‍ර <i>agga</i>	අග <i>aga</i> 'chief.'
ස්වර්ග <i>swarga</i>	සග්‍ර <i>sagga</i>	සග <i>saga</i> 'heaven.'
ශ්‍රමණ <i>śramaṇa</i>	සමණ <i>samaṇa</i>	සමණ* <i>samaṇa</i> 'priest.'
ධර්ම <i>dharma</i>	ධර්ම <i>dhamma</i>	දම <i>dam</i> 'doctrine.'

4. The semivowel *ai* is unknown to the Páli, as it is to the Singhalese. When we therefore take Sanskrit words in which this letter occurs, and compare them with their corresponding Páli and Singhalese words, we obtain the same results to which we have already adverted; as for example:—

San.	Páli.	Sip.
ආයුර් <i>aiśvarya</i>	ඉසරිය <i>issariya</i>	ඉසුරු <i>isuru</i> 'prosperity.'
ආර්ථ <i>airāṭvaṇa</i>	ආර්ථ <i>erāṭvaṇa</i>	ආර්ථ <i>erawaṇa</i> a name.
කේලාස <i>kailāsa</i>	කේලාස <i>kélāsa</i>	කේලෙස් <i>keles</i> a name.
තෙල <i>taila</i>	තෙල <i>téla</i>	තෙල් <i>tel</i> 'oil.'
වේර <i>vaira</i>	වේර <i>véra</i>	වේර <i>vera</i> 'hatred.'

5. The results are precisely the same when we compare Sanskrit words in which the semivowel *au* occurs with their corresponding words in the Páli and Singhalese, in which this vowel sound is entirely lost. Thus, for instance:—

San.	Páli.	Sip.
ඔෂධ <i>auśhadha</i>	ඔෂධ <i>śshadha</i>	ඔසු <i>osu</i> 'drug.'
ගෞර <i>gaura</i>	ගෞර <i>góra</i>	ගෞර <i>gora</i> 'white.'
චෝර <i>cha ra</i>	චෝර <i>chóra†</i>	සෝර <i>sora</i> 'thief.'
නාව <i>nau</i>	නාවා <i>návā</i>	නාව <i>neva</i> 'ship.'
මුත්තික <i>mauktika</i>	මුත්තික <i>muttika</i>	මුතු <i>mutu</i> 'pearl.'
රෞරව <i>raurava</i>	රෞරව <i>róruva</i>	රෞරව <i>róruva</i> a name.

6. A silent *s* before certain consonants, which is to be found in the Sanskrit, is lost in the Páli, except perhaps in

\* Vide ante, p. 245.

† The Páli *ච* is changed into *භ* in the Singhalese, since the former sound is not known to our language. See *Sidat-Saṅgará*, p. liv.



conjunction with *v* ; and this is exactly the case in their corresponding Siphalese words. Thus :—

San.	Páli.	Sip.
වතතු <i>wastu</i>	වතතු <i>wattu</i>	වත් <i>wat</i> 'riches.'
කකඬ <i>skandha</i>	කකඬ <i>khandha</i>	කඳ <i>kaṇḍa</i> 'trunk.'
කම්භ <i>stambha</i>	ඵභ <i>thambha</i>	ටැඹ <i>ṭemba</i> 'pillar.'
තූති <i>stuti</i>	ථූති <i>thuti</i>	තුති <i>tuti</i> 'thank.'
අස්ථි <i>asthin</i>	අට්ඨි <i>aṭṭhi</i>	අට <i>eta</i> 'bone.'
අෂ්ට <i>ashṭa</i>	අට්ඨි <i>aṭṭha</i>	අට <i>aṭa</i> 'eight.'
පෘෂ්ඨ <i>prishṭha</i>	පිට්ඨ <i>pīṭṭha</i>	පිට <i>piṭa</i> 'back.'
පුෂ්ප <i>pushpa</i>	පුප්ඵ <i>puppha</i>	පුප් <i>pup</i> 'smell.'
ස්ථවිර <i>sthawira</i>	ථෙර <i>thera</i>	තෙර <i>tera</i> 'elder priest.'
තුෂ්ඨි <i>tushṭi</i>	තුට්ඨි <i>tutṭhi</i>	තුටු <i>tutu</i> 'gladness.'
හස්ත <i>hasta</i>	හත්ථ <i>hattha</i>	හත් <i>hat</i> 'hand.'



## PROCEEDINGS OF MEETINGS.

---

### EVENING MEETING,

*October 2nd, 1856.*

---

*Present :*

C. P. LAYARD, Esq.  
W. SKEEN, Esq.  
R. DAWSON, Esq.  
L. DE ZOYSA, Esq.  
Dr. WILLISFORD  
Captain DUDLEY  
C. LORENZ, Esq.

L. NELL, Esq.  
J. DALZIEL, Esq.  
M. COOMARASAMY, Esq.  
J. NIETNER, Esq.  
Rev. C. ALWIS  
Rev. J. THURSTAN  
THE ASSISTANT SECRETARY.

Mr. Layard stated, that the object of the Meeting was to take into consideration the mode in which this Branch of the Asiatic Society could be revived and set in action. The gentlemen present were all aware, that owing to different causes, one of which was the removal from the Island of several gentlemen of known scientific attainments who took an active part in the transactions of the Society, the institution had been dormant for some time. It was however thought desirable that an effort should be made to revive it now, and to obtain for it the support of the public ; and it had been intimated to him, that if the Society should succeed in obtaining the support so much desired, it would be in their power to secure the publication of some works of Oriental literature of undoubted importance. Mr. Gogerly, whose absence that night he regretted, spoke in a letter which had been just received, of the assistance, which the Society might, if properly encouraged, derive from its Native members. He also referred to Mr de Alwis, who was prepared with several papers on subjects of interest, and to Mr. de Zoysa, whom he thought competent to undertake the translation of the portion of the *Mahāwamsa*, which had been left untranslated by Mr. Turnour. Mr. Nietner had some very valuable papers on the Natural History of the Island, and he believed there were others in the Island, who would,

with the opportunity afforded of doing so, render much assistance in various other branches of Science. It was therefore necessary, that the Secretary should be instructed to call a General Meeting for the purpose of electing Members and Office-bearers. He had entertained hopes of obtaining for the Society the services of Captain Oldfield as Secretary; but he regretted to say that that gentleman, who was prevented from attending the meeting by an indisposition, had communicated that his contemplated removal from Colombo would render it impossible for him to accept the office. He had, however, kindly promised, that while at Trincomalie, he would at all times be ready to devote a portion of his time to the Society's service. They had therefore, not only to select a gentleman for the office of Secretary, but also to elect members for a Committee. It would be desirable to ask His Excellency the Governor to be the Patron of the Society, and the Hon'ble the Chief Justice, who he, was glad to find took a deep interest in the Society's welfare, as Vice-Patron. Among other matters of difficulty which the Society had to contend with at present, the want of a place to transact business in, was perhaps not the least. He had spoken to several gentlemen on the subject, and it was suggested by some, that this want might be remedied by the erection of a story over the United Service Library. Indeed he could name gentlemen who had promised to subscribe £10 each towards the purpose, which he thought could be easily effected. The Colonial Secretary, with whom he had also conferred, had expressed his willingness to aid in the promotion of the measure, and if a representation were duly made, he (Mr L.) had no doubt that they might be able to secure the sanction of the Government as well as a grant from the Legislature for making such necessary alteration in the U. S. Library, as should render a portion of that building available for the use of the Society, and for a Public Museum. To facilitate the attainment of the object in view, he had, through the kindness of Mr Churchill, procured a plan of the proposed alterations, which he had great pleasure in laying before the Meeting.

Mr. Alwis stated, that owing to certain repairs which the rooms of the Loan Board had lately undergone, it had become necessary to remove the Society's Library and its Museum (which had been in those Rooms) into an apartment of the Colonial Secretary's Office, and that the Society at present had no place in which they could meet or transact business. Owing to the causes to which Mr. Layard had referred, the Society had been dormant for some time past. Its last General Meeting was held so far back as February 1854, and no Committee Meeting had been convened since the 17th August of that year. The Proceedings of those Meetings

would be found published in the Society's Journal for 1853-54, which had yet to be issued to the subscribers. It was, however, gratifying to notice, that owing to the liberality of Government, and the kindness of the gentleman who presided over its Printing Establishment, the last volume of the Journal, which contained several interesting papers, extending over 300 pages, had been printed without any expense to the Society. It was attributable to this circumstance, that they were able to find on reference to the accounts of the Treasurer, a balance, though a trifling one, in favour of the Society. It amounted to £8 7s. 3d., and would doubtless have been larger, had the subscriptions of the two past years been collected. The omission to do this was not unintentional. It was considered, that while the operations of the Society were unavoidably suspended, it was neither just nor fair to call upon subscribers to pay. If it be the wish of this Meeting that these operations should be revived, it was not only necessary to select a Secretary, but also desirable to place at the disposal of the Society a room in which its Library might be placed, and its proceedings held

After some desultory conversation, in which several gentlemen took part, Mr. Dawson remarked, that public support should not be solicited, until the Society had been completely reorganized. It was most necessary to hold a Meeting, and to appoint a Committee, before an application could be made with anything like reason, either for the assistance of Government or of the public. With regard to the proposal to build a story over the Library, he feared that it was not a practicable one. The Library was public property, and although we might contribute to the erection of an upper story, the building itself would remain vested in the public, and not in the Society. He would therefore propose, that the Secretary might be instructed temporarily to rent a house in the Fort, and he thought that the funds of the Society, though small, would enable them to do so, until other arrangements could be made by which the Society might be enabled to obtain a permanent place for the despatch of business.

It was then *Resolved* :

1.—That Mr. Dawson be kindly requested to look for and engage a building in the Fort, in which the Society might be accommodated for the present. Mr. Dawson expressed his assent.

2.—That the Assistant Secretary be instructed to convene a General Meeting of the Society for Saturday the 11th instant, at 4 p. m. Dr. Willisford kindly offered his house for the proposed Meeting, which was accepted.

3—That a deputation consisting of Mr. C. P. Layard, Dr. Willisford, Mr Dawson, the Rev. Mr. Thurstan, Mr. J. Alwis, Mr. Coomarasamy and Mr. Lorenz, be requested to wait on His Excellency the Governor, the Hon'ble the Chief Justice, and the Hon'ble the Major General, and to invite them to join the Society, and to allow themselves to be nominated the Patron and Vice-Patrons of the Society respectively. Assented to by the Gentlemen nominated as a deputation.

JAS. ALWIS,  
*Asst. Secretary.*

---

### GENERAL MEETING,

*October 11th, 1856.*

*Present :*

The Rev. D. J. GOGERLY, in the Chair.

The Rev. J. D. PALM

C. P. LAYARD, Esq.

J. BAILEY, Esq.

GEORGE LEE, Esq.

L. DE ZOYSA, Esq.

M. COOMARASAMY, Esq.

R. DAWSON, Esq.

Capt. DUDLEY

W. SKEEN, Esq.

C. A. LORENZ, Esq.

Dr. WILLISFORD

J. NIETNER, Esq.

THE ASSISTANT SECRETARY.

Read the proceedings of the last Evening Meeting. Mr. Layard said, that in accordance with the 3rd Resolution just read, he had spoken to His Excellency the Governor intimating to him, on behalf of the Society, that a deputation was appointed to wait upon him, and that His Excellency expressed his willingness to receive them at a time which he would afterwards appoint. Mr. Dawson said, that he had made inquiries, and had engaged at a rental of £1 per month, two rooms behind the Chamber of Commerce, and that in his opinion they were sufficient to hold the Society's Museum and Library. If, however, they were deemed insufficient to hold the Society's General Meetings, he had no doubt that the Chamber of Commerce would, on such occasions, gladly accommodate the Society within their Rooms. *Resolved*, that the rooms engaged by Mr. Dawson be rented on behalf of the Society at £1 per month, commencing from the 1st November next.

The Assistant Secretary laid before the Meeting a Memorandum in which the Committee of 1854 resolved to discontinue the services of the Society's Taxidermist, and to appoint a peon at a salary of £1 per month. He stated at the same time, that the Society had no peon at present, and that it would be desirable to engage one, especially to take charge of the Society's new rooms.

Mr. Skeen drew the attention of the Meeting to the state of the Society's finances, and laid on the Table the accounts, shewing a balance in favour of the Society of £8 7s. 3d.

Read a letter from the Secretary of the Auckland Museum to Mr. Dawson, requesting that that gentleman would use his influence with the Ceylon Branch of the Royal Asiatic Society, to forward to the above Institution, some of the productions of this Island.

*Resolved*, on the suggestion of Captain Dudley, that a letter be written to Colonel Hope, requesting that he would be pleased to communicate to this Society the result of his Meteorological observations.

The following Gentlemen were then proposed and elected Members of the Society :—

J. BAILEY, Esq. ...	... { Proposed by R. Dawson, Esq. Seconded by C. P. Layard, Esq.
J. NIETNER, Esq. ...	... { Proposed by Dr. Willisford. Seconded by R. Dawson, Esq.
Major T. SKINNER..	... { Proposed by C. P. Layard, Esq. Seconded by R. Dawson, Esq.
Colonel HOPE ...	... { Proposed by C. P. Layard, Esq. Seconded by R. Dawson, Esq.
F. CHURCHILL, Esq.	... { Proposed by C. P. Layard, Esq. Seconded by R. Dawson, Esq.
Captain GOSSET ...	... { Proposed by C. P. Layard, Esq. Seconded by R. Dawson, Esq.
L. NELL, Esq. ...	... { Proposed by J. Alwis, Esq. Seconded by C. A. Lorenz, Esq.
H. BALL, Esq. ...	... { Proposed by J. Alwis, Esq. Seconded by R. Dawson, Esq.
The Rev. J. THURSTAN	... { Proposed by R. Dawson, Esq. Seconded by C. P. Layard, Esq.

The Office-bearers and Committee, with the Patron and Vice-Patrons of the Society for the current year, commencing from this date, were then nominated and appointed as follows :—

*Patron :*

His Excellency the Governor of Ceylon.

*Vice-Patrons :*

The Hon'ble the Major General.

Sir William Carpenter Rowe, Chief Justice.

The Right Rev. the Lord Bishop of Colombo.

*President :*

The Hon'ble C. J. MacCarthy, Esq.

*Vice-President.*

The Rev. D. J. Gogerly.

*Secretary :*

Dr. Willisford.

*Assistant Secretary :*

James Alwis, Esq.

*Treasurer :*

C. A. Lorenz, Esq.

*Librarian, Curator, and Corresponding Secretary :*

J. Nietner, Esq.

*Committee :*

George Lee, Esq.

C. P. Layard, Esq.

M. Coomarasamy, Esq.

Major Skinner.

W. Skeen, Esq.

Dr. J. B. Misso.

L. de Zoysa, Esq.

R. Dawson, Esq.

L. Nell, Esq.

Rev. J. Thurstan.

The Assistant Secretary laid on the table two papers which he proposed to read, viz., a translation of the *Attanagala-wapsa*, or the History of Three Kings, comprising an account of King Saṅgatiśsa, during whose reign was set up the so-called "glass pinnacle" which was at present a subject of much inquiry in England. Also a paper on "The Titles of Address amongst the Sinhalese."

Mr Layard presented a paper on the "Principles of Sinhalese Chronology," by the Rev. C. Alwis. Mr. Nietner stated, that he had several Entomological papers to present to the Society, and that he would be glad if steps were taken at once for their speedy publication.

The Chairman remarked, that according to the Rules of the Society, it was desirable to submit all papers to a Reading Committee for their approval, before their publication could be sanctioned.

*Resolved*, that owing to the lateness of the hour, the subject of the appointment of a Reading Committee be deferred till the next General Meeting.

*Resolved*, that the Treasurer be requested to collect subscriptions for the current year, commencing from the 1st instant, and that the next General Meeting be held in the course of November next.

The business of the Meeting having ended, a vote of thanks was given to the Chairman, and the Meeting separated.

D. J. GOGERLY.

## GENERAL MEETING,

*November 11th, 1856.**Present :*

The Rev. D. J. GOGERLY in the Chair.

L. NELL, Esq.

M. COOMARASAMY, Esq.

C. P. LAYARD, Esq.

J. BAILEY, Esq.

W. SKEEN, Esq.

C. A. LORENZ, Esq.

L. DE ZOYSA, Esq.

Rev. J. D. PALM.

Rev. J. THURSTAN.

THE SECRETARY.

THE ASSISTANT SECRETARY.

The Proceedings of the Meetings of October 11th and November 1st, having been read and explained, the Secretary called attention to the Resolution of the 11th October, referring to the appointment of a Reading Committee.

*Resolved*, that the following gentlemen be requested to act as such:—  
M. Coomarasamy, Esq., The Rev. D. J. Gogerly, L. Nell, Esq., J. Neitner, Esq., J. De Alwis, Esq.

*Resolved*, that the following gentleman be elected a Corresponding Member of this Society, Dandries De Silva Gooneratne, Mohandiram of Bentotte.

Proposed by C. Lorenz, Esq.

Seconded by H. Muttukistna, Esq.

*Resolved*, that the Rev. B. Boake be elected an Ordinary Member of this Society.

Proposed by C. P. Layard, Esq.

Seconded by J. Bailey, Esq.

Mr De Alwis then proceeded to read his Papers, entitled "Native Titles of Address," and "The *Attanagalu-wapsu*." *Resolved*, that these papers be referred to the Reading Committee.

Mr. Coomarasamy having read a paper entitled a "Synopsis of the *Saiva Siddhantam*, or The Religious Philosophy of the Hindoos." *Resolved*, that it be referred to the Reading Committee for report.

The first Number of the Society's Journal being out of print, and frequent applications being made for the same, it was resolved that Mr. Skeen be requested to reprint it, and to furnish 100 copies to the Society.

JAS. ALWIS,

*Assistant Secretary*



## GENERAL MEETING,

*February 27th, 1857.**Present :*

The Rev. B. BOAKE in the Chair.

J. NIETNER, Esq.

C. P. LAYARD, Esq.

W. SKEEN, Esq.

H. MUTTUKISTNA, Esq.

L. NELL, Esq.

M. COOMARASAMY, Esq.

Rev. J. KATS.

L. DE ZOYSA, Esq.

THE SECRETARY.

The Minutes of the last Meeting having been read and confirmed,

Mr. C. P. Layard suggested, that as some of the specimens of Natural History were evidently falling into decay, the Secretary be authorized to incur any necessary charges in maintaining them.

The question having been discussed, it was resolved accordingly.

*Resolved*, that Messrs. Layard, Nietner, Skeen and Willisford, be appointed a Sub-Committee to arrange and report on the Library and Museum.

L. Leisching, Esq., having been proposed by C. P. Layard, Esq., and seconded by J. Nietner, Esq., was elected an Ordinary Member.

F. W. WILLISFORD,

*Secretary.*

## ANNUAL MEETING,

*January 21st, 1858.**Present :*

Dr. F. H. KELAART, in the Chair.

The Rev B. BOAKE.

M. COOMARASAMY, Esq.

J. ALWIS, Esq.

L. DE ZOYSA, Esq.

Dr. WILLISFORD.

W. SKEEN, Esq.

J. CAPPER, Esq.

The Minutes of the last Meeting having been read, the Secretary proceeded to read the Report of the Committee for the past year.

The Ceylon Branch of the Royal Asiatic Society was reorganized in October 1856, and having secured rooms for its Library and Museum, affording far greater accommodation than had previously been the case, has now 37 resident and 32 non-resident Members. To this number, it is hoped there will be many accessions in the course of the present year.

The return to Ceylon of Mr. Capper, one of the originators of the Society, is an event from which the Committee augur many and permanent benefits. His former services are sufficiently conspicuous to need more than a passing observation. The palmy days of the Society were those in which that gentleman officiated as Secretary with unflagging interest, and the most constant attention. To the same duties he has kindly signified his willingness again to devote his leisure and abilities; and the Committee have the greatest satisfaction in submitting his name as Secretary, among the List of Office-bearers for the ensuing year, conjointly with Mr. Alwis, to whom the Society owes considerable obligation for his present services.

From other causes also, the Committee anticipate for the future more vigorous action in this branch of the Royal Asiatic Society. During the construction of the Railway, and from the contemplated sojourn in the Island of an enlarged Military force, many scientific gentlemen will probably arrive, from whose enlightened research much may be expected, and who will doubtless gladly avail themselves of the facilities afforded by this Society for the prosecution and publication of their investigations.

From the Treasurer's account it will be perceived, that the income of the Society for the last 14 months has been £47 1s 9d., exclusive of subscriptions not yet collected. Of the amount already collected, £25 16s. 5d. have been expended, leaving a balance of £21 5s. 4d. in the Treasurer's hands. Against this balance, however, there is a liability of nearly £14 for house rent, for which as yet no demand has been made; and considering that the purchase of several new works on Oriental Literature is thought desirable, the necessity for increased aid in the way of donations and subscriptions is manifest. Indeed, were it not for the liberality of the Government in permitting the Journal of the Society to be printed free of expense at the Government Press, the funds of the Society could not have borne the outlay necessary for the publication of its papers. This arrangement, however, while it has had the effect of saving considerable expenditure, and has enabled the Committee to issue their Journals in a superior style, is yet attended with some inconvenience, which the Committee hope, with the sanction of the Society, they will shortly be able to obviate. The inconvenience alluded to, is the delay, which from the large amount of work required for Government purposes, necessarily demanding the immediate attention of that establishment, inevitably takes place in the issue of the Society's Journal. To this cause is attributable the non-appearance of a reprint of the first Number of the Society's Journal, which had been resolved upon, and of which copies are not now to be had; and the delay that has arisen in the publication of the fourth Number of the new series, of which only 100 pages have been completed. To remedy this evil,

it is proposed that the Society should engage a Compositor, to be employed under Mr. Skeen upon the papers now in hand, so as to enable him to issue the forthcoming Number at an early date.

Your Committee bring this subject thus prominently before the Society, as they have had several applications for complete sets of the Journals, not only from subscribers, and scientific gentlemen visiting Ceylon, but also from Oriental scholars in England, which they have been unable to comply with, from the cause already stated.

The Journal now in course of publication will contain a larger amount of information than any of its predecessors, and of a character interesting alike to the scholar, the antiquary, and the man of science. It will consist of papers by Mr. Nietner, describing numerous new species of Ceylon Coleoptera ; a Translation of certain chapters of the Mahawamsa, describing the magnificent works for irrigation constructed by King Parakkrama Buhoo, A. D. 1153-1186, with an Introduction and Notes by Mr. De Zoysa ; a Translation of the *Attanagalu-wansa*, or the life of Sri Sanga Sô, with an Introduction and Notes by Mr. J. Alwis ; an Essay on Hindu Philosophy, by Mr. M. Coomarasamy ; a Paper on the Sinhalese Method of computing Time by the Rev. C. Alwis ; and a Paper on Honorary Titles and Modes of Salutation among the Sinhalese, by Mr. J. Alwis :—to which it is proposed to add a Paper on Sinhalese Music by Mr. L. Nell ; one on new and interesting species of Nudibranchiate Molluscs, Sea Anemones and Planaria, found in the Harbour of Trincomalee, by Dr. Kelaart ; and also a paper by Mr. J. Alwis, on the supposed identity between Nāgasena, of Buddhistical Annals, and Nāgajuna, the character who holds a distinguished place in the Rāja Tarangini. The three last papers will be read to the Society, and the Committee have no doubt but they will be found of sufficient interest to be submitted to the Committee of Papers with a view to their publication.

Your Committee desire to bring to the notice of the Society, the state of its Library and Museum.

In addition to the Reports and Medals of the Great Exhibition of 1851, entrusted to the Society, the Committee have to acknowledge the presentation by His Excellency the Governor, of sixteen volumes of the original prospectuses of the various exhibitors ; the Reports and Medals of the Paris Exhibition, awarded to this Island ; and the Report, &c., of the Madras Exhibition. They also beg to acknowledge the receipt of many valuable works in the course of the past year.

These presentations and donations invest your Society with a character and importance which it is desirable to maintain. As the only Literary and Scientific Institution in the Island, the value of its Library cannot be over-estimated. Travellers from several parts of Europe, to some of whom your Committee have lately afforded access, have thankfully acknowledged its worth. And to the Scholar and the Orientalist it affords a fund of knowledge which is elsewhere sought in vain.

In view of these considerations, therefore, your Committee recommend the purchase of all works having reference to Ceylon, with which the Library has not as yet been furnished; and also the acquisition of many Oriental works of undoubted interest and usefulness, among which may be enumerated, several of Professor Wilson's publications, including his Sanscrit Dictionary, and Grammar, and the *Lalita Vistra*, the legendary Life of Budhu, now being published in the Bibliotheca Indica at Calcutta.

The Society's Museum, the Committee regret to state, has, for some time past, from the want of a Curator, been greatly neglected. This want they hope to remedy, by the appointment to that office of a gentleman who has signified his willingness to discharge the duties of the appointment until the Society may be in a position to effect better arrangements. Considering how rich Ceylon is in natural productions, it is to be lamented that the funds of the Society will not allow of the appointment of a salaried Curator and Taxidermist.

The Committee see no reason why Ceylon should not, aided by Government, obtain a Museum, similar to those which now flourish in South Africa, and in the Presidencies of India. The report of the former has been forwarded to your Society, by order of His Excellency the Governor of the Cape, with a letter from Mr. Edgar Layard, the Curator, in which he expresses a hope that "the Society may be disposed to sanction a system of mutual exchange."

The Committee would, in conclusion, urge upon the Members individually the desirableness of increased efforts on behalf of the Society.

To the resident Members in Colombo they would recommend the resumption of the Evening Meetings, from which in times past much benefit was derived. In the language of a former Report, they "have a sensible influence on the prosperity of the Society, tending as they do, to the opening up of new subjects of enquiry, and generally imparting additional vigour to the efforts of its Members."

Joint Secretaries { F. W. WILLISFORD.  
                              { J. ALWIS

## TREASURER'S ACCOUNT.

1856.	£	s.	d.	1856.	£	s.	d.
Nov. and Dec. Receipts ...	32	7	9	Nov. & Dec. Disbursements	8	14	9
1857.				1857.			
Jan. to Dec. Receipts ...	14	14	0	Jan. to Dec. do	17	1	8
				Balance in hand .	21	5	5
	£47	1	9		£47	1	9

C. A. LORENZ, *Treasurer.*

The Report having been adopted, —It was *resolved*, that Mr. Skeen be authorised to engage Compositors at the Society's cost to hasten forward the Journal.

The Secretary and Librarian were authorised to purchase any new works on Ceylon, and to submit any others to the Committee for purchase.

The following Gentlemen were then balloted for, and declared elected as Members of this Society :—

J. MAITLAND, Esq. ...	...	...	{ Proposed by J. Alwis, Esq. Seconded by W. Skeen, Esq.
J. H. MARSH, Esq. ...	...	...	{ Proposed by J. Capper, Esq. Seconded by the Rev. B. Boake.
F. J. DE SARAM, Esq. ...	..	..	{ Proposed by Dr. Willisford. Seconded by Dr. F. Kelaart.
C. KRIEKENBECK, Esq. ..	..	..	{ Proposed by Dr. Willisford. Seconded by J. Alwis, Esq.
R. F. MORGAN, Esq. ...	...	...	{ Proposed by J. Alwis, Esq. Seconded by J. Capper, Esq.
J. A. DUNUWILLE, Esq. .	.	.	{ Proposed by M. Coomarasamy, Esq. Seconded by J. Alwis, Esq.
E. ORMISTON, Esq. ...	...	...	{ Proposed by Dr. Willisford. Seconded by J. Capper, Esq.

The Secretary laid on the table letters from the Cape Society of Natural History, and the New Zealand and Batavian Society, and it was resolved that he be instructed to reply to them forthwith and to forward copies of the Society's Journal.

The following Members were then proposed and erected as the Office-bearers for the current year :—

*Patron :*

His Excellency the Governor.

*Vice-Patrons :*

The Honorable Major General Lockyer.

The Honorable Sir C. J. MacCarthy, Colonial Secretary.

The Right Rev. The Lord Bishop of Colombo.

The Honorable Sir W. Carpenter Rowe, Chief Justice.

*President :*

The Rev. D. J. Gogerly.

*Vice-President :*

The Rev. B. Boake.

*Secretary :*

J. Capper, Esq.

*Assistant Secretary and Librarian :*

James Alwis, Esq.

*Treasurer :*

C. A. Lorenz, Esq.

*Curator :*

J. Maitland, Esq.

*Committee :*

C. P. Layard, Esq.

Dr. F. W. Willisford.

Geo. Lee, Esq.

M. Coomarasamy, Esq.

The Rev. B. Boake.

W. Skeen, Esq.

R. Dawson, Esq.

Captain Dudley.

J. H. Marsh, Esq.

L. de Zoysa, Esq.

L. Nell, Esq.

*Reading Committee :*

The Rev. D. J. Gogerly.

The Rev. B. Boake.

C. A. Lorenz, Esq.

Louis Nell, Esq.

L. de Zoysa, Esq.

James Alwis, Esq.

M. Coomarasamy, Esq.

**Donations to the Library during the year 1857 :**

- Smithsonian Contributions to Knowledge, vols. VII and VIII.  
 Smithsonian Report for 1854.  
 Eighth Annual Report of the Smithsonian Institution.  
 Essay on the Architecture of the Hindus.  
 Bombay Asiatic Society's Journal for July 1857.  
 Same for October 1844.  
 Journal of the Royal Asiatic Society of Great Britain, No. XV.  
 part 2.  
 Two Maps of Assyria and of ancient Nimroud.  
 Atlas of Geological Papers of Western India.  
 Geological Papers on Western India.  
 Constitution and Bye laws of the New Orleans Academy of  
 Sciences.  
 Handbook of Sinhalese Conversation, presented by the Rev.  
 C. Alwis.

**Donations through the Government of Ceylon during 1857 :**

- Exhibitor's Prospectuses of Exhibition of 1851, 16 vols.  
 Catalogue of Paris Universal Exhibition of 1855.  
 Catalogue of Works on the Great Exhibition of 1851.  
 Jury Reports on the Exhibition of 1855.  
 First Report of the Commissioners for the Exhibition of 1851.  
 Third                      do                      do                      do  
 Report of the Management of the British part of the Paris  
 Exhibition.  
 Report of the Juries of the Madras Exhibition.  
 Official Descriptive Catalogue of                      do  
 Report of the Madras Exhibition of Raw Products.  
 Madras Exhibition Catalogue 1855.  
 Official Catalogue of the French Exhibition.  
 Report of the Cape Exhibition in 1855.  
 Report of the Committee thereon.  
 3 Certificates for the Island of Ceylon, by the Paris Exhibition.  
 4 Medals—three Bronze and one Silver.



**JOURNAL**  
**OF THE**  
**CEYLON BRANCH**  
**OF THE**  
**ROYAL ASIATIC SOCIETY,**  
**1858-59.**

---

---

**VOLUME III.**

---

---

**No. 11.**

---

***EDITED BY THE HONORARY SECRETARY.***

---

THE DESIGN OF THE SOCIETY IS TO INSTITUTE AND PROMOTE ENQUIRIES INTO THE HISTORY,  
RELIGION, LITERATURE, ARTS, AND SOCIAL CONDITION OF THE PRESENT AND FORMER  
INHABITANTS OF THE ISLAND, WITH ITS GEOLOGY, MINEROLOGY, ITS CLIMATE  
AND METEOROLOGY, ITS BOTANY AND ZOOLOGY."

---

**COLOMBO :**  
**PRINTED AT THE "CEYLON OBSERVER" PRESS.**  
**1893.**





## CONTENTS.

---

	PAGE.
The Laws of the Buddhist Priesthood.—By the Rev. D. J. GÖGERLY                   ...           ...	253
Notes on the Mythological Legends of the Sinhalese.— By J. DE ALWIS, Esq., Assistant Secretary           ...	262
A Statistical Enquiry into the state of Crime in Ceylon.— By J. CAPPER, Esq., Honorary Secretary                   ...	293
Sinhalese Rhetoric.—By J. DE ALWIS, Esq., Assistant Secretary                   ...           ...           ...	308
Scripture Botany of Ceylon.—By W. FERGUSON, Esq.           ...	316
Remarks on the supposed identity between Nágárjuna and Nágaséna.—By J. DE ALWIS, Esq., Assistant Secretary                   ...           ...           ...	346
Expenditure on Public Works in Ceylon.—By J. CAPPER, Esq., Honorary Secretary                   ...	354
APPENDIX :—Proceedings of Meetings                   ...           ...	i
Society's Circular..                   ...           ...	xii
Correspondence concerning the Mauritius Exhibition           ...	xiv
Correspondence with the Society of Arts                   ...	xv

---

## E R R A T A .

---

Pages 1—24 should have been numbered 253—276.



# ROYAL ASIATIC SOCIETY, CEYLON BRANCH.

---

## THE LAWS OF THE BUDDHIST PRIESTHOOD.

BY THE REV. D. J. GOGERLY.

---

In the Papers laid before the Society respecting the laws relative to the Ordination of Buddhist priests, the different precepts are literally translated in the order in which they are recorded in the *Mahá Vaggo*. But this mode, although exact, is tedious, and therefore will be abandoned in this, and the following Papers. The substance of the precepts will be given, with such observations as may tend to elucidate them.

It has been previously noted, that Buddha declined the formation of a code of laws for the government of the priestly order when he was requested to do so by Sáriputra, one of his chief priests; stating, that it would be more advisable to legislate as circumstances should arise requiring directions to be given. The precepts thus given were afterwards arranged under separate heads. The *Párájika* and *Páchittiya* divisions contain the Moral precepts, binding upon every member of the order. The *Mahá Vaggo* and *Chála Vaggo*, contain the Ecclesiastical laws, and the *Pariwára Páñho* is a technical recapitulation and explanation of the other four sections of the *Vinaya Piṭaka*.

The second chapter of the *Mahá Vaggo*, explains how the *Póya*, or *Upósatha* days were instituted, and gives the rules of their observance. The *Póya* days are, up to the present time, observed by all Buddhists, who on.

the changes of the moon attend their temples, make offerings, hear the discourses of Buddha read, or his precepts explained, and devote a portion of the day to meditation, and other religious observances. But the days of the New and of the Full Moon are regarded by the priests as days of peculiar solemnity, each priest being required to be present at a general assembly of the order, at an appointed place within the district, in which he resides, that his moral conduct may be investigated: and if he have been guilty of any irregularity, he must confess it, and submit to ecclesiastical discipline.

The institution of the *Upôsatha* resulted from the recommendation of Seniya Bimbisára, the king of Magadha. He observed that the teachers of the *Paribbájaka* sect were accustomed, on the days of the changes of the moon, to assemble their followers and preach to them, in consequence of which they became very popular.

He waited on Buddha, stated the fact, and requested him to direct his priests to adopt a similar course of proceeding. To this Buddha assented, and calling an assembly of his priests directed them to meet on the days of the New and Full Moon, and on each intervening eighth day. They accordingly met on the days now known as the day of New Moon, the eighth day, the fifteenth day, and the eighth day after the fifteenth day.

At first they remained quite silent when assembled, as they had received no directions how they were to conduct themselves. When it was reported to Buddha, that the people were much dissatisfied with these silent meetings, he directed that on each day of assembling, they should preach to the people, and explain the doctrines of their religion. It also occurred to him, that it would be advantageous if, on the New Moon, and on the fifteenth day of the month, the priests, in addition to their public preaching, should hold a private meeting in which the Moral precepts, called the *Pátimokkha*, should be recited,

and the obedience or disobedience of each priest be ascertained, that thus the purity of the priesthood might be secured. For this purpose, he directed that certain boundaries should be determined on by the *Saṅgha*, (or assembly of the priests,) and that all the priests living within that boundary should meet together on the days appointed.

The boundaries are in no case to include a district more than three yoduns (about 40 miles) in extent; and they are not to be intersected by a river, unless there be a bridge or ferry boat, by which the priests may pass without danger: neither shall one large boundary include smaller boundaries, but each district must be distinct from every other. If a priest reside in a jungle, the boundary shall include the space of 300 feet around his hut. If priests be in a vessel, or on a bank, or rock, within a river or lake, so far as a man can throw water, is to be accounted a boundary.

There may be many residences for priests within a district, but the *Upósatha* services are to be conducted in one place only, which place has been previously consecrated. This *Upósatha* hall is to be in general near to the residence of the senior priest of the district. All the priests who are in the district at the time appointed for the meeting, shall assemble in this place: if the number be such that they cannot be accommodated in this one room, a porch, or a verandah, may be added to it; and after it has been consecrated the whole building will be one *Upósatha* hall. Notice of the time of meeting shall be given by the senior priest. No layman is to take any part in the proceedings.

Priests are not allowed, except in their own residences, to be without their three robes; but as at times in coming to the *Upósatha*, their upper garments may become wet, permission is given to lay aside one of them, if necessary, during the service.

The *Upósatha* service consists of five parts:—

1. The opening service.

2. The recital of the laws concerning *Pārdjika* (leading to expulsion).

3 The recital of the laws concerning *Saṅghādisesa*, (leading to suspension).

4. The *Aniyata dhamma*, or doubtful cases.

5. The minor offences in detail.

In general, the whole is to be recited, and the necessary enquiries to be made: but in case of danger from armies, thieves, demons, or other injurious things, the service may be shortened. The service is to be conducted by the senior priest, or by some competent person nominated by him in the General Meeting, who is not to be impeded in the performance of his duties by any of those present, upon pain of ecclesiastical censure. The precepts are to be recited in a clear and audible voice. If any priest have a charge to make against another, he is previously to intimate his intention to the person against whom the charge is to be brought: if this notice has not been given, the accusation is not to be heard. No groundless charge is to be made, under pain of censure; and if an unjust sentence has been passed by the *Saṅgha* against any person, it may be put aside if four or five members are of opinion that it should be disallowed: if only two or three members dissent, they may enter their protest: if only one, he may say, "I do not agree," and thus record his dissent.

The senior priest is to command a junior to sweep the *Upōsatha* hall, to arrange the seats, and, when necessary, to light the lamps. If the junior refuse, he is to be placed under censure.

No priest within the district is allowed to be absent without a sufficient reason being stated: if he be detained from the service by sickness, he is to make to another priest a declaration of his own purity, and of his assent to the meeting being held, (that is, that he is not acquainted with any reason why it should not be held): otherwise he

is to be brought on his couch to the place of meeting. If he be placed under restraint by enemies, so as to be unable to attend, the *Saṅgha* is to depute a member to see him, and to receive his declaration of personal purity, and of his assent to the meeting being held.

The senior priests must be present before the *Upōsatha* service is commenced.

If from any cause, a minority of the priests in the district commence the service, and afterwards a number larger than those present at the commencement should come in, the service is to be re-commenced : but if the members, who come last, be only equal to those who commenced the service, or fewer, the service is not to be re-commenced, but only the declaration of personal purity to be received from those who came last.

It is necessary that five priests should be present to constitute a *Saṅgha* for ordinary purposes ; but if only four be present, the *Upōsatha* service may be attended to : if there be only two or three persons, they may state their own personal purity.

If any one has been guilty of a fault, he must go to a pure priest, and having removed his robe from one shoulder, kneel down before him, and with uplifted hands confess his fault : if he profess himself to be sorry for what he has done, and state his determination not to repeat the offence, he may be absolved. But this applies only to minor transgressions : absolution from the crimes called *Saṅghādisesa*, can only be granted by the *Saṅgha*.

The *Pātimokkha*, which is directed to be recited at every bi-monthly *Upōsatha* meeting, contains the whole of the precepts recorded in the *Pārājika* and *Pachiti* divisions of the *Vinaya Piṭaka*, but without the reasons for their enactment, or the adjudged cases recorded in illustration of the law. The priests being assembled in the *Upōsatha* hall,



the officiating priest commences the service, by enquiring if the room has been swept, the seats arranged, and water provided for drinking. He then proceeds to enquire, if there be any objection to the meeting being held, and whether it be the proper time for the recital of the *Pātimokkha*.

After these preliminaries, he states, that with the permission of the *Saṅgha*, he will conduct the service, and that after each section of the *Pātimokkha* has been read, the question will be put thrice, "Are all the members present free from the breach of any one of these precepts?" If any one be guilty, he is to confess it: if he be free from guilt, he is to remain silent. They are reminded that this is an appeal to each person, and that to remain silent when they know themselves to be guilty, is a great crime. He then recites the four precepts contained in the *Pārdjika* section.

#### *The Pārdjika Section.*

[The penalty attached to a breach of any one of these four precepts is permanent expulsion from the body.]

I.—A priest not having confessed his inability to obey the rules binding on the priesthood, and thus withdrawing himself from the community, who shall have carnal intercourse with any being, human, animal, or super-human, is *Pārdjiko*, and is expelled.

II.—Any priest, who, with a dishonest intention, shall appropriate to himself any property, (to the amount of one rupee or more.) which has not been given to him, is *Pārdjiko*, and is expelled.

III. - A priest who is guilty of taking away human life, or is in any way accessory to that act, either by word or deed, is *Pārdjiko*, and is expelled.

IV.—A priest who shall falsely assume a high spiritual character, and the super-human power connected with that character, is *Pārdjiko*, and is expelled.

*The Saṅghādisesa Section.*

I.—He who wilfully pollutes himself, is guilty of *Saṅghādiseso*.

II.—A priest, who, with an impure intention, comes in personal contact with a woman, either by taking her hand, touching her head, or by touching any other part of her body, is guilty of *Saṅghādiseso*.

III.—A priest, who, with a corrupt mind, holds libidinous discourse with a woman, is guilty of *Saṅghādiseso*.

IV.—A priest who endeavors to excite a woman to have criminal conversation with himself, is guilty of *Saṅghādiseso*.

V.—A priest who carries messages between the sexes, whether to promote marriage or concubinage, is guilty of *Saṅghādiseso*.

VI.—A priest who procures a residence to be built for himself, must not have the house larger than 12 cubits of Buddha's measure in length, and 7 cubits in breadth; he must have it consecrated by priests, must choose a place free from danger, and surrounded by an open path. He who neglects any of these things is guilty of *Saṅghādiseso*.

VII.—A priest who procures a Vihāra to be erected for his own residence, in conjunction with other priests, must assemble priests to consecrate the site, choose a place free from danger, and surrounded by an open path: otherwise he is guilty of *Saṅghādiseso*.

VIII.—A priest, who, with an evil intention, brings a groundless charge against another priest for the purpose, of having him expelled from the priesthood, is guilty of *Saṅghādiseso*.

IX.—A priest who shall avail himself of some circumstance foreign to the charge, to substantiate that which would lead to the expulsion of another priest, is guilty of *Saṅghādiseso*.

[This is thus illustrated: A priest violently hated two eminent members of the body, a male and a female, and brought a charge against them of incontinence. To substantiate this charge he procured two goats; to the male he gave the name of the priest to be accused, and to the female that of the priestess. Having seen the animals copulate, he stated that he had witnessed the act of criminal conversation between M. and N., giving the names of the priest and priestess.]

X.—He who endeavors to stir up strife or promote schism among the priests, shall be thrice exhorted to abandon his efforts. If he listen to the exhortations, it will be well; but if he disregard them, he is guilty of *Saṅghādiseso*.

XI.—If two or three priests shall become partisans of any other priest, and agree to affirm the correctness of whatever he may do or say, stating, "He speaks and acts in accordance with our views: his declarations are consistent with truth and discipline, and we perfectly agree with him"; they shall be thrice warned to abstain from such partisanship; but if they persist in their course of proceeding, they are guilty of *Saṅghādiseso*.

XII.—If any priest be an evil speaker, and when he is reproved for any act contrary to the precepts, shall improperly say "Hold no conversation with me either for good or bad: keep your observations to yourself and do not interfere with my concerns; I also will abstain from making remarks on your proceedings"; and shall thus impede the harmony of the community; he shall be thrice exhorted not to continue in this state. If he submit to this counsel, it will be well: if not, he is guilty of *Saṅghādiseso*.

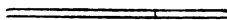
XIII.—If any priest residing in the neighbourhood of a town or village, shall be a corrupter of public morals by his own improper practices: and if this conduct is seen or heard of by other priests, they shall state the facts to him and advise him to leave that neighbourhood.

Should he reply, you are self-opiniated and partial in your judgments, endeavoring to terrify priests with your threats: they must reply, Speak not thus, your improper conduct is generally known; it is advisable that you should leave this place. Thrice they are thus to admonish him; if he obey the admonition it will be well; if not, he is guilty of *Saṅghādiseso*.

When any one is guilty of any of these crimes he is to be suspended, and placed under the supervision of the other priests for as many days as he concealed the crime, and for six days additional. When he is sufficiently humbled he may be restored to his former position as a priest, but this can only be done by a Saṅgha of twenty members.

End of the thirteen *Saṅghādisesa*.

(To be continued.)



## NOTES ON THE MYTHOLOGICAL LEGENDS OF THE SINGHALESE.

BY JAMES DE ALWIS, ESQ., ASSISTANT SECRETARY.

---

There is no reasonable doubt entertained at the present day, as to the belief that Asia was "the country in which the worship of the deity became first corrupted by human inventions, and finally degenerated into a system of idolatry, where the adoration of the creature was substituted for that of the Creator."\* There is abundant testimony to prove that both Greece and Rome obtained their religious worship from Asia.

From the position which Ceylon occupies in a geographical point of view, it can hardly be doubted, that the systems of Mythology known to the Hindús, found an early and easy passport to Ceylon. However much the Indian system is opposed to the tenets of Buddhism,† the religion of Laúká ; the Singhalese poets have never, it seems, scrupled to adopt that which was used by their Hindu neighbours. ‡

---

\* Tooke's Pantheon, Introduction, p. 9.

† *Ramayana Barata—etulwadedummulyuta—kimutbasirata, &c.* See note in my Sidath-Sangarawa, pp. xi, xii.

‡ It is in accordance with such a feeling, that thoughtless native Protestants consider it not improper to take part in Buddhistical ceremonies, or that Buddhists themselves, under various circumstances, shew an attachment to the forms of Christian worship, believing it by no means inconsistent with their own faith, which inculcates all the virtues which ennoble the soul, besides reverence to parents, charity to the poor, humanity to animals, and love towards all mankind. The case, however, with Singhalese Roman Catholics is different; and the difference is owing to the rigid requirements and ecclesiastical discipline of that Church. And it is a remarkable fact, that amongst the Singhalese *Roman Catholics* there is no wavering of mind, no partnership faith (if I may so call it), and no hankering after the religion of their forefathers.

In the creed of the Buddhist some of the Hindú deities are, however, not regarded as the others are—‘mere creatures of fancy,’ ‘the metaphors of poetry,’ and ‘the personifications of nature.’ Some are recognized in Buddhism as really existing beings, and to them the Buddhist makes offerings.\* Of these we shall treat in due order.

The object of this Essay is a brief inquiry into the Singhalese Mythology, as it may be gathered from our poets; and in that investigation it will be our endeavour slightly to compare the systems known to the East and West.

There are two sources from whence the Singhalese have obtained their Mythology :—1st, Their Religion or their *bana*, the Buddhist scriptures; and 2nd, Tradition, or that which is found in the works of Hindú writers.

Under the first head may be mentioned, not only the fabulous *déviyo* recognized in Buddhism, and to whom homage is paid by the votaries of Gautama; but also the fabulous system of the universe, and its gods and *nāgas*: and under the second head are comprehended the metaphors and allegories of poets, the personification of abstract notions, or symbolic representations of the powers or attributes of nature, the planetary system, and its influence on man.

Innumerable are the worlds of the Universe. Each system or *Sakwala*, scattered throughout the infinity of space, has its own sun, moon, and stars. The earth with its visible sun and moon, and its heavens and hells, constitute the *Magul-sakwala*, which is surrounded by a rock called the *Sakwala-gala*. The earth has in its centre the *Mahamera*, around which are oceans, mountains, continents, lakes, islands, &c. The earth is 240,000 yojuns, or 3,840,000 miles, in solidity.

---

\* But some of them are not objects worthy of adoration. The “Pūjāvaliya” compares the folly of those who ‘listen to the teachings of Siva or Vishnu,’ to the Brahman in the legend [see Hardy on Buddhism, p. 472.] who was deceived by the Jackal. “They will be deceived likewise, and the object at which they aim will not be attained.”

It rests on *Jala-poḷowa*\* or the world of waters, 7,680,000 miles in depth; and this is supported on *Wá-poḷowa*, or world of air, 15,360 miles deep; and this again rests in a vacuum called *Ajatákāṣa*.

"Thales," says a late writer, "entertained the idea, that the earth floated on the ocean, whilst Democretes taught that it rested on the air like a bird with its wings outspread." The Buddhist doctrine is in accordance with these opinions. When Milindu, king of Ságala, said to Nágaséna, that he could not believe that the earth was supported by the world of water, and this by a world of air, the priest took a syringe and pointed out to him, that the water within the instrument was prevented from coming out by the exterior air; by which the king was convinced that the water under the earth might be supported by the *Ajatákāṣa*.† Professor Wilson, in his *Vishṇu Purána*, says, "The supreme being placed the earth on the summit of the ocean, where it floats like a mighty vessel, and from its expansive surface does not sink beneath the water."

One of our poets, in extolling the praises of Buddha to the skies, says, that "the beams of his rays dived through *Wá-poḷowa*, and thence proceeded to the end of the immensity of space, *Buwaga*,—and thence spread themselves throughout the whole *Sakwala* or universe:"

වාසොලවෙති කිම් ද      මුළු සක්වලා විසි      ද  
 ගැවසි ගොසින් බවන ද      දිවේ රුද්දි මුනිදු රැක      ද  
*Káviyásékharā.*

\* According to some of the Hindú legends, the earth rests upon the back of a tortoise. Thus, in the play entitled *Maláti and Madhava*:—

'Thy foot descending spurns the earthly globe,  
 Beneath the weight the broad-backed tortoise reels.'

*Hindú Plays*, ii. p. 58

According to another passage in the *Mudra Raksha*, the earth is supposed to rest on the heads of *Séshta*, a snake of innumerable heads.

'A weary burden is the cumbrous earth  
 On *Séshta's* head, but still he bears the load.'—ib. p. 185.

† One of the causes of an earthquake, according to Buddha; see *Bengal A. S. Journal*, vii. p. 1,001.

That which first demands our attention, as the theme of every poet, the personification of strength, firmness, and greatness, is the *Maha-mera* or Mount Meru,\* the Olympus of the Greeks.

තර කර සුතෙර තද තෙද දිමුතු දිවසුර—*Seḷalihini Sandēsa*.

The *Vishṇu Purāṇa* and the Buddhist scriptures place it in the centre of Jambudwīpa. It is represented like the Olympus, to reach the skies, and so high, that a stone, if let fall from its summit, would not reach the earth in four and a half months.

"A brazen anvil falling from the sky,  
Through thrice three days would toss in airy whirl,  
Nor touch the earth till the tenth sun arose."

*Elton's "Hesiod, Theog."* 893.

Like, too, the Olympus on which the Gods were assembled by Zeus, Mount Meru is the resorting place of the gods, the abode of *Śakra*, or the Indra of the Hindús.

මෙරමුදෙහි හිට-සුරිද පමුසුල් අස්ක උණුව—*Guttīla-kāvya*.

*Maha-mera* is of various colours: on the east, it is like silver; on the north-east virgin gold; on the south sapphire; on the south-east azure blue; on the west coral; on the south-west blue; on the north gold, and on the north-west bright gold. These colours are imparted to the adjacent rocks and oceans. Hence, the "Milk-white-ocean," or *Kiri-muhuda*, which we shall hereafter notice under the second head.

This great mountain is alternately surrounded by seven oceans and rocks,† and probably it is these seven rocks

\* "I had almost forgotten that *Meros* is said by the Greek to have been a mountain of India, on which their *Dicynsos* was born, and that *Meru*, though it generally means the north pole of the Indian Geography, is also a mountain under the city of Naishada or Nysa, called by the Grecian Geographers *Deonysipole*, and universally celebrated in the Sanscrit poems."—*Sir William Jones's Works*, vol. i. p. 264.

† "According to the geography of the Purāṇas," says Professor H. H. Wilson, in his *Hindú Plays*, ii. p. 58, "the earth consists of a series of central circles and six other annular continents, separated from each other by as many oceans of different fluid substances."



which the Bráhmans regard as the seven insular continents, which are severally surrounded by oceans. It is said, that Priy writta drove his carriage seven times round the earth, and the seven seas are the seven ruts left by its wheels. The poet in alluding to the seven rocks, which are *Yugandhara*, *Isadhara*, *Karautka*, *Sudaršana*, *Némindhara*, *Winataka*, and *Aṣwakaṛṇa*, says :—

පෙර පුර පුරට පවරෙව්වෙරටටයි	වි
සප්ත පුර පවරෙව්වෙරටටයි	වි
පුරපුරටත් අවසන් එකිනෙකටම	වි
මහර රුවන් සත්කුලපති වලලු	වි

Guthila.

The four continents are *Uturukuru-divayina*, *Purva-videhaya*, *Aparagbyāna*, and *Jambudwīpa*, of which the last is on the south of Meru, and has 500 islands. The first, on the north of the great Meru, is the happiest of the four. It is celebrated for the tree *Kap-tura*, which, like the horn of Amaltheia, given by Zeus to the daughter of Melissius, conferred whatever was desired by its possessors. The *Kap-tura* is, in its properties, the same as *Sura-tura*, 'the heavenly tree,' which gives whatever is desired by the gods. We may here, by the way, refer to the *Situmipi* gem, and the *Súrabi* cow, the personifications of abundance and charity. The poet, in reference to these three, says :—

පුරපුර නම් ගසෙකි සිතුරුවන නම් පහතෙ	කි
පුරපුර සතු දෙකෙකි, මොහුවනිලිකෙන් කරවටුවෙකි	

On the north of *Jambudwīpa* is the *Himāla-wana*, a great forest, in which are situated some of the mountains, famous in Hindú and Singhalese poetry, and which are represented as the abodes of gods and devils. *Himāla-wana* is also famous for its lakes, among which is the *Anótatta vila*, and 500 rivers: one of these, which, after taking a circuitous course, ascends into the sky, is called the *Ahas-gaṅga*, 'the Ganges of heaven,' supposed to trickle through

the tresses of Siva.\* The following couplet of the poet, in allusion to this 'heavenly river,' is well known :—

සුරගත තරතරත අමාවැසිවසිතාරත.

*Kaviyasékkhara.*

There are several other minute particulars connected with the foregoing account of the Universe; but as they can be easily learnt on reference to the books on the subject, we now turn our attention to

1. *ŚAKRA* or Jupiter, the personification of the firmament.

'Aspice hoc sublime candens, quem invocant omnes Jovem.'

He is called by various names; *Śakra* is his most usual designation in the Singhalese, whilst *Indra* is that commonly used by the Hindús. He is the ruler of the highest heaven,

.....the great father of the gods above.

*Virgil.*

Hence he is called *Sura-rada* or *Sura-isura* in Singhalese: he is the patron of "100 sacrificial offerings," and is thence called *Siya-hutan*: he has a diamond weapon in his hand called *viduru* or *vajra*†: he,

.....whose awful hand

Disperses thunder on the seas and land,

Dispensing all with absolute command.

*Virgil.*

is therefore named *Vidu-rata*, or *Vidu-ravi*. He is called *Purañdura*, from the fact related of him, that he divided his city with king *Mahá Mandathu* after the expulsion of the *Asurás*, who may be compared to the Titans and giants of the

\* 'May the tresses interwoven with a circular garland of serpents for flowers, where the waters of the *Mandakini* are flowing over the lower chaplet of skulls worn in the crest &c.'—*Hindú Plays*, ii. p. 9.

† "The diamond and thunderbolt according to Hindú notions, are of one substance and are called by the same appellation, *Vajra*, as the fall of the thunderbolt is usually followed by rain, and may thus be considered as its cause. The propinquity and the mutual friction of the same substance upon the wrists of our young ladies, is in like manner supposed to occasion the dispersion of the fluid treasures of the cloud."—*Wilson's Mégha Dúta*, note, p. 73. I may state it as a fact that the native Singhalese of the fifth century regarded diamond as a non-conductor of lightning. It is so stated, in unmistakeable language, in the "*Maháwansa*" and the *Tika*.

Greeks, as they were much larger than any order of beings, and made war with the gods.\* He has a wife named *Madora* or *Suddá*—

සුද්ධම් සුරඳ්ද එලද.—*Guttala*.

and is thence designated *Madorapiya*. He is *Sak* or *Sakra*, from his—"power divine in all things known." He is the *Indra* or *Induradikpati*, the regent of the East, whence he appears in the character of Jupiter Tonens. He is represented as having a thousand eyes; and he

Whose all conscious eyes the world behold. — *Homer*.

is thence called *Sahasēs*. One of the versified works on synonyms, has the following lines embodying all the names above given :—

සුරඳ්ද සියසුකන් විසුරකද සුරද් ර  
 විසුරවි මඬොරජය සක් ඉද්ද සුරඉසු ර  
 සකසැස් මෙකම් වේ දික්පතිට ඉද්ද ර

*Nāmarāliya*.

Thus, in the words of Sir William Jones,† "This Jupiter or Deispeter, is the Indian God of the visible heavens, called *Indra* or the king, and Divespeter, or Lord of the sky, who has also the character of the Roman Genius, or chief of the good spirits, but most of his epithets in Sanscrit are the same with those of the Eonian Jove." He had three principal consorts, one of whom is the *Suddá*, to whom we have already referred. The others are *Sudummá* and *Nanda*, of whom one of our bards sings :—

සුරඳ්ද සුදම්මා දිලිසි දිලිසි සුරඬකන්ද.—*Guttala*.

One of Indra's courtesans, *Rambá*, Sir William Jones identifies with "the popular Venus, the goddess of beauty that was produced, according to the Indian fabulists, from the froth of the churned ocean."

Indra's celestial city is called *Amarāvati*; his palace,

\* It is generally agreed, that the Giants were personifications of the elements, and that their wars with the gods refer to the throes of the world in its state of chaos. — *Hardy*, p. 47. ●

† See his works, p. 248.

*Vijayót*\*; his park, *Nandana†*; his chief elephant, *Airavana‡*; his bow,§ “the rain-bow,” and his charioteer, *Mátali*, who is made to say by one of our poets—“Asurás are my foes, Śakra is my lord: know thou that I am *Mátali*, the charioteer”—

රිසාඤ්ඤාතමි : මග්ගිම සුරදරාත ම :

දඬුව ඉදුරාතමි : මමස මාතලීරියාදුරාත ම :

Although he is the Regent of the East; yet his Olympus is the *Maha Mera*.

High heav'n the footstool for his feet he makes,  
And, wide beneath him, all Olympus shakes.—*Homer*.

A Singhalese poet briefly sums up Indra's attributes in the following lines, wherein he is made to say; “a possessor of a thousand eyes, the chief of (both the worlds) heaven and earth, the Regent of the East, I am called by men Śakra, the supreme God.”

දහසක් දිවැස් ඇති, දෙ දෙවිලොවටම අදිපති  
මට ඉදුරාදික්පති, දකෝකක් දෙවිදුගයි පවසති :

*Guttīla*.

I shall briefly allude here to the character which this Déva holds in Buddhistical works. There he has few of the attributes which are described in the *Puránas*, and is represented rather as a venerable personage, the friend of the faithful ministering to their wants and comforts, than as receiving their homage, or as the object of their prayers. It is said of Śakra, that he was a frequent hearer of Buddha's *bana*, that he thereby obtained merit, and prolonged his own existence. He is however characterized in several books, as being exceedingly jealous of pious men, lest they may, after migrating from their present existence, supersede him in his kingly

සුරරද පාසටන් විජකොත්තමි මහරා.—*Sēlalihiṇi Sandēsa*.

+ පිළිස ඵාදුන් කදුන් වකසට—*Guttīla*.

‡ කොමවන් ඵරවතකාගෙමින් සුරකොන් පිරිවරා කොමිත.—*Kusa Jātaka*

§ “In Indra's bow, o'er yonder hillock play.”—*Mēgha Dūta*.

office.\* Thus, according to Hindú writers, when he saw that Nara and Náráyana had devoted themselves to ascetic exercises, he was greatly alarmed, and sent *Káma* 'love,' and *Vasanta* 'spring,' with the nymphs of heaven, to inflame the sages with passion, and thus end their penance. He however failed in his attempts; for Náráyana, inviting the tempters with much civility, created out of a flower-stalk placed on his thigh, a nymph, the superiority of whose charms covered the *Apsarasas* of heaven with shame, and induced them to return to Indra, with the newly-created goddess as a present.† Numerous instances of this jealousy and treachery towards men, are also related in the Buddhistical annals. In the legend of *Lómasa Káśyapa*, Śakra is represented in the character of the devil, tempting the Rishi to commit a forbidden sin, from which he was only deterred by the power of a miracle. But, where he apprehended no danger to himself from the superior merits of others, he appears as their guardian, benefactor, and friend. Numerous also are the instances in which he is said to have helped Gautama, (when Bodhisat) out of difficulty and misfortune. Thus, when Gautama was a squirrel, and lost his young ones, Śakra caused them to be found; when Vessantara, he prevented the king's being deprived of his "help-mate," and nourished his children on the top of a tree; when Guttila, he taught the minstrel to defeat his ungrateful pupil; when Gautama became Buddha, and overcame Mára, he shouted forth his hallelujahs throughout the universe. In his last moments the "*Máhavaṃsa*" relates, Buddha placed Lañká under the protection of Śakra: (see "*Máhavaṃsa*" p. 47;) and when Gautama died, Śakra sang a hymn, consoling himself under the reflection, that "All living beings relinquish their existence in this world, and that in like manner the Teacher of the world, the incomparable, the being of felicitous advent and of power, the supreme Buddha also dies!"

\* See Pr. Monier William's *Sakuntalá*, p. 7, notes.

† Hindú Plays, by Pr. H. H. Wilson.

2. The Deity of Brahmanical faith, the divine cause, and essence of the world, from which all creatures emanate, is BRAHMA.\* He is represented as being 192 miles high, his feet as 30 miles long, and his robes 256 miles. He is looked upon by the Hindús as the creator of man, a doctrine opposed to the tenets of Buddhism, by which the chief "first cause," that of which even a savage has some conception, is ignored. "The beings who were created by Brahma," says Professor Wilson in his *Vishnu Purana*, "of the four castes, were at first endowed with righteousness and perfect faith; they abode wherever they pleased, unchecked by any impediment, their hearts were free from guile, they were pure, made free from evil by observance of sound institutes. In their sanctified minds *Hari* dwelt, and they were filled with perfect wisdom, by which they contemplated the glory of Vishnu."

According to Buddha, Bráhma is a believer in his tenets. He is said to be the Deva who received into his arms the infant Siddharta on his birth, and breathed the consolatory words in the ear of his mother :—" Rejoice, for the son thou hast brought forth will be the support of the world." We will not here pause to consider him as the adorer of Buddha, by whom he stood firmly when attacked by Mára ; to whom he made the first offering ; and from whom he first heard the *bana*. Suffice it to remark, that the Singhalese Poets take him in the light in which he is regarded by the Hindús—the personification of Purity, Sanctity and Wisdom.

පිරිසිදුදෝ අතද, එකලා අතත්තාතම	ද
සීතන රුසිතනුබද, පරම බමනමි නොමය ගුතම	ද

"O virtuous Bódhisat! thou art the very Bráhma in purity (and sanctity); in brightness and loveliness; in loneliness of life; in infinite learning, and great wisdom;—the theme of the Rishis."

\* In Csoma Kőrösi's Analysis of the Tibetan annals, the following passage occurs, the genuineness of which is doubted by many Buddhists in Ceylon: "Shakya asks several questions of Brahma, whether was it he who caused the several revolutions in the destruction and regeneration of the world. At last he himself asks Shakya, how the world was made,—by whom? Here are attributed all changes in the world, to the moral works of the animal beings, and it is stated, that in the world all is illusion: there is no reality in the things: all is empty."—*Asiatic Researches*, xx. p. 424.

It is in regard to these attributes, with the arrogance of an Ovid, when he said,

Jamque opus exigi; quod nec Jovis ira, nec ignis  
Nec poterit ferrum, nec edax abolere vetustas;

the author of the “Kavyasékharā,” speaks of himself in the following strain :—

‘Like a Brahaspati on earth renown’d,  
The limits of each science fully found,  
Radiant with heaven-derived religion’s beams.  
On learning’s head a living gem he streams.’\*

He is represented as holding “an umbrella in hand, and hence his name, *Sat-ata*. He is called *Baram* or *Bamba*, from his acknowledged greatness; *Vidi* from his being the author of destination; *Siwu-wat* from his having four faces; *Ló-éjara* from his being the teacher of the world; *Piyum-yon*, from his having been produced out of a lotus; *Ven-put*, from his being the son of Vishnu; *Aṭa-kara*, from his having eight arms; *Sarasawīya-kal*, from being the husband of Saraswati; *Piyum-dsana* from his having a lotus for his seat; *Vé-guru*, from being the teacher of the Vedas; *Raṇ-gēba*, from his golden lustre; *Aṭa-net*, from his having eight eyes; *Sura-deṭu* from being the ancestor of the Gods; and *Ló-isuru*, the chief of the world. The above names are collected by one of our poets in the following couplets :

සතතබරම විදිසිවුන්ලෝ දීර	ර
නිවට පියුමියොන්වෙන් පුරද අටක	ර—
බමසර සප්තකල් පියුමසතමගු	රු
රත්නබද්ධවෙන් පුරදෙවුලෝ ඉසු	රු

We have already seen, that the Asuras were inimical to Sakra, whence they were called *Dew-rupu* or *Sura-saturu*. This is in consequence of their expulsion from *Tawtisa*, one of Indra’s heavens, to the foot of *Maha-mera*, where they now reside. Fearful of a repetition of their attacks, the four

\* See my *Sidat Sapparāwa*, p. cxi.

† සෙවියා සිච්චරම.—*Kavyasékharā*.

guardian Devas or *Hatara-uaram-deviyo*,† are appointed to superintend the four quarters of that mountain. The Rev. S. Hardy has the following observations on this head :

“ The four guardian dewas, *Dhritardshṭra*, *Virúḍha*, *Virú-páksha*, and *Waiṣrawaṇa* have palaces on the summit of Yúgandhara rocks. The palace of *Dhritardshṭra* is on the east. His attendants are the Gandharwas, a *kela laksha* in number, who have white garments, adorned with white ornaments, hold a sword and shield of crystal, and are mounted on white horses. The Déva is arrayed and mounted in a similar manner, and shining like a *kela laksha* of silver lamps, keeps guard over the possessions of Sakra in the eastern division of the Sakwala. The palace of *Virúḍha* is on the south. His attendants are the Kumbhándhas, a *kela laksha* in number, who have blue garments, hold a sword and shield of sapphire, and are mounted on blue horses. The Déva is arrayed and mounted in a similar manner, and shining like a *kela laksha* of lamps composed of gems, keeps guard over the southern division of the Sakwala. The palace of *Virú-páksha* is on the west ; his attendants are the Nágas, a *kela laksha* in number, who have red garments, hold a sword and shield of coral, and are mounted on red horses. The Déva is arrayed and mounted in a similar manner, and shining like a *kela laksha* of torches, keeps guard over the western division of the Sakwala. The palace of *Waiṣrawaṇa* is on the north : his attendants are the Yakku, a *kela laksha* in number, who have garments adorned with gold, and are mounted on horses shining like gold. The Déva is arrayed and mounted in a similar manner, and shining like a *kela laksha* of golden lamps, keeps guard over the northern division of the Sakwala.”

The *Lókapálas*, who are sometimes confounded with the guardians of the cardinal points, may be here mentioned. They are represented as divinities appointed by Bráhma to act as rulers over different created things. They are amongst others the following :—*Indra*, sovereign guardian of the earth, and the regions below and above the earth ; *Sóma* of



sacrifices ; *Varuṇa*, of the waters ; *Vāyu*, of the unembodied element ; *Vaiṣṇavaṇa*, of demons and rakshas ; *Parjanya*, of oceans, clouds, rivers ; *Nandi*, of quadrupeds ; *Superna*, of birds of prey ; *Garuṇḍa*, of the winged race, &c., &c. Each city, grove, and house has a presiding deity ; and thus in the “*Seḷalihinī Sandēsa*,” the poet reminds us of the “household god,” by adoring whom the *Sarika* was to proceed on his errand :—

කළුසිරිත් කළුසුරු දෙවිය සිරිසොට.... 71

The city too (*Kēḷaniya*), into which the poet sent his message, is said to be the seat of *Vibhishana*. It is in accordance with this notion, that the Sinhalese are very reluctant to pull down an old house ; or even

.....an ancient tree, whose branches wear

The marks of village reverence and care :—

*Mēgha Dūta.*

and which is generally supposed to be the abode of *dēvas*. This notion of household-gods, is entirely derived from the Hindús, according to whom “every city,” says Prof. Wilson, “has its own *Śrī*, its own fortune or prosperity, which in former times seems to have been represented by an image with a temple of its own. The practice amongst the ancients of considering a city under the protection of some well-known divinity is more familiar to us, but an analogous superstition with that of the Hindús also prevailed amongst the polytheists of Europe.”

Thus in “The Seven against Thebes ;” the Theban women seek their shrines of the gods, who are the guardians of the city. The poet in the “*Mālatī and Madava*” says ;

.....Till they come,

Obedient to the holy dame's injunctions,

The matrons of her father's household send,

The maiden to the temple of the deity

That guards our walls, to pray that naught molest,

No evil interrupt the happy rite —

*Hindu Plays*, II. p.p. 64-5.

3. The chief of all the infernal deities, the SUMMANAS or Pluto of the west, has, in one point of view, much resemblance to our *Yama*, as exercising a sovereignty over the dead, and as being the king of Hell; whilst in another, as the chief of the infernal deities, he is identical with our VESAMUNI, or the Indian *Kuvéra*. The poet embodies his various names in the following verses:

දනිදුකුචෙර වෙසමුනිකන්ද දත      ද  
 සිරිද, තරකන නිදුරිද රජරජ      ද  
 නිදු උතුරු යා රුදු—

He is the lord of wealth, and is thence named *Danindu* or *Danada*, a name which has some resemblance to Pluto's Latin designation, *Dis*, signifying "wealth." He is represented as extremely deformed, as indeed his Grecian parallel is described "blind and lame;" and hence he is called *ku*, "vile" and *vera*, "body"—*Kuvéra*. From the circumstance of one of his cities being called Visana, he is named *Vesamuni*, although some suppose that it means "Son of Visa." He is called *Yak-rada*, that is, Summanas, or chief of all the *Yakhs*, or the infernal deities of the Greeks.

වෙසකකතවර-දලකමදතමුද්ව      ර  
 වෙසමුනි රදවර-වෙසකකතවර-වෙසක      ර

*Kavmini-kottala.*

In the *Vana Parva* of the "Mahábhārata," it is stated that *Kuvéra*, the son of Pulastya, by his attentions to his grandfather Brahma, was made immortal, and appointed the god of wealth; that his capital was *Lanká* or Ceylon; and that his attendants were demons. It is doubtless his tale which induced the ancient historians of this island to regard its inhabitants before the arrival of Vijaya as "supernatural" "non-human" beings or "demons." But I am reminded by my pandit, that this notion of "demoniac inhabitants," whom Vijaya found on his arrival in Ceylon, may be also traced to the fact that *Rávana* the ancient king of Ceylon is mentioned in the *Uttara Rámáyana* and *Padma Purána* as the progenitor of the

*Rakshó*, or a distinguished member of a demoniac race. As a deity in whose hands are the destinies of mankind, he receives the appellation *Siri-dá*, "the promoter of prosperity." Unlike other deities, who are represented as being seated on brute-beasts, Kuvéra is said to ride on a human being, a circumstance by which he receives the name of *Nárdyana*. He is attended by Kinnaras, the musicians of Heaven, and is thence called *Kiñduriñdu*. He is esteemed very powerful, and is thence called *Raja-raja*, "the king of kings." Like the Roman *Dis*, of whom it is said by Cicero, that he is so called, because "all the natural powers and faculties of the earth are under his direction," *Kuvéra* is the Master of the inestimable treasures of the earth, and more especially of the nine gems, (of which we shall speak hereafter,)—and is therefore called *Níndu* 'chief of treasures.'

ඉපුරුදකදසිසනිකෙලස්තැතරදත.

උතුරුදිසිපුරුදිතිමෙපුරවැජමෙන

*Sēlalihini-Sandēsaya.*

He is the Regent of the North, and is thence called *Uturu-ná*. Mount Kailásha is his abode jointly with *Sivá*, who is said to be Kuvéra's friend—thence the appellation *Rudu-saha*. But *Álaka* is his principal city, which is therefore received by our bards as the centre of all those regions which teem with wealth :

ඉපුරෙපසිදුදිකදෙස්වෙසමුතිකෙසිස

*Parawī Sandēsaya*

The nine *Nidhi* or 'treasures' are enumerated in the following stanza given in several Sanscrit works :—

පදමෝග්‍රිකාං මහාපදමං කංඛෝමකරක ජලං

මුකුඤ්ඤක භිලාශව ඛේශව නිමිකෝතව

They are translated by Professor Wilson to be the "lotus," "large lotus," "shell" or "conch," "fish," "tortoise," "crest," "a mathematical figure used by the Jains," *nida* "colour" and "dwarf." But, evidently gems are meant : and I may here give Mr. Kindersley's translation of the passage, through the

medium of the Tamil; viz., the coral, pearl, cat's-eye, emerald, diamond, sapphire, ruby, and topaz. The ninth is left undetermined. It is *nīla* which probably means the *nīl-amani* of the Tamils or the *nīl-keta* of the Singhalese, which is commonly called "the blue sapphire," and esteemed of great value. And I may here advert to the fact that the blue sapphire is sometimes formed of the Ceylon ruby, which may be seen in various stages of formation, exhibiting the shades which are produced by a mixture of the lake and blue.

4. The Déva who has not his parallel amongst the Grecian and Roman gods, the most inimical to Buddhas, is said to be MARA, the ruler of six heavens. No intelligible reason is, however, given for his antagonism to Buddhism, but "the fear by his discourses many beings would obtain the blessedness of the Bráhma lókas, and the privilege of *nirwána*, which would prevent the repeopling of the inferior world in which he reigned, when the Devas then inhabiting it had fulfilled their period of existence."\* Though acknowledged to be a being of mighty powers, he is nevertheless represented, owing to this opposition, as a Déva full of "cunning." In the life of Buddha given by Csoma Körösi, he is called "the devil," and is described as being extremely envious, and as reflecting thus: "Should he become Buddha all animal beings instructed by him, will grow judicious and wise, and then they will not obey my commands or order." This hate of his towards Buddha, seems to resemble that of Satan; and his temptations the assaults of the Devil. For, when Siddharta left home to become Buddha, Mára, the "agent of Sin," instantly appeared, saying, "let me stop the great mortal," and rising aloft into the air, thus addressed him: '*Mahavéto*, depart not: on the seventh day from hence, the heavenly *Chakkaratanan* will most certainly come to pass. Then thou shalt exercise sovereignty†

\* Spence Hardy "Manual of Buddhism," p. 171.

† "The devil taketh him up into an exceeding high mountain, and

over the four great quarters of the earth, together with their 2000 isles : Blessed, wait." The great mortal asked 'Who art thou?' 'I am Vasavatto.' "I am aware that both empire and universal dominion are proffered to me : I am however not destined for royalty : depart Mára ; approach not thus.\* When Gautama became Buddha, Mára brought an army equipped with swords, axes, javelins, bows, arrows, spikes, clubs, &c., to wage war against the great sage. The army is described to have been so great in number, that it well nigh overpoised the earth. The soldiers assumed many terrific forms of wild animals, demons and spirits ; and continued rushing towards the spot where Buddha sat under the Bó tree. Apparitions of ill omen descended in various forms, proclaimed the advent of Mára. Thousands of appalling meteors descended from heaven. The earth quaked ; and there was darkness throughout the world. Indra, Bráhma, and a host of other celestials who were in attendance upon Buddha fled at the appearance of Mára, who came mounted upon his charger, the Elephant called *Girimékhala*. The great sage was thus left alone ; and the assault commenced. Crashing storms of fire, brimstone, and weapons came down ; but they hurt not one hair of Gautama. A hundred thousand volcanos were hurled at him ; but they assumed the form of garlands on their approach to Buddha. Every other imaginable devise was likewise ineffectual ; and Mára fled with shame. His enmity did not cease here. When Buddha announced his approaching dissolution, Mára imperceptibly exerted his influence over the mind of Ananda, and prevented him from comprehending this exposition, though repeated twice.†

---

showeth him all the kingdoms of the world and the glory of them. And saith unto him, All these things will I give thee &c." Matt. iv. 8, 9.

\* Turnour's version of the "Buddhavap̄sa" (Bengal Asiatic Society's Journal vii p. 30.)

† This interference prevented Ananda from entreating the sage to prolong his existence which he had the power of doing even for a whole *kalpa* if he was duly requested thereto.—Turnour, *loc. cit.* p. 1001.

Sixty two artifices, of which Mára was guilty, are spoken of by the votaries of Gautama ; and it is generally believed by them, that he was the founder of all the systems of religions on earth, except Buddhism ; and that he sent our blessed Lord Jesus Christ into the world to set aside Buddhism, which was at the time captivating the minds, and winning the affections of thousands in the East. In a little work\* extant among the Siñhalese, the following passages occur in reference to the belief above referred to :—

---

\* This appears to be a fragment of a larger work, entitled the 'Histories of Milindu and Kristá (Christ).' There is no mention whatever of the person by whom it was written. It contains, among other matters, a narrative of the circumstances attending the birth and crucifixion of 'Christ' of 'Nazareth.' It combines a life of our Saviour, with a few particulars connected with the controversial dialectics of Milindu and Nágaséna. The writer does not (as he would, if it were a fabrication give it a show of inspired authenticity, by stating it to be the production of a Rahat : but merely says, that the two stories (whether a tradition handed down, or a written work, it is not clear), were brought down by certain Buddhist priests, who arrived on a religious mission on this Island, during the reign of Vialagam Báhu, which was, according to "Mahávaṇṣa," A D. 519 : when indeed, we find from the "Mahávaṇṣa," a body of priests were assembled, for the first time in the island, to commit to writing the oral traditions concerning the national religion of Lakká. (See "Mahávaṇṣa," p. 207.) The countries too from which the priests came are mentioned, and they are those which frequently occur in other Buddhistical works—"Aramana, Malawa, Ghandára, Pygóa, Telalup, Rakkadu, and Sagal." The birth of Christ is stated to be in the time of Nágaséna 485 A. B. This, it is important to observe, is at variance with the date for the same event assigned in other Buddhistical works. [The "Mahávaṇṣa," says that Buddha had predicted the birth of this sage 500 years after his death. In the Tibetan annals (see Asiatic Researches, xx. p. 400) the same prediction is recorded and that Nágárijuna would appear 400 years A. B. The *Raja Tarangini* shows that this celebrated personage visited Kasmir about 460 A. B. See Bengal Asiatic Society's Journal, v. p. 536.] These discrepancies which unsettle the date given in the "Mahávaṇṣa," a book which is considered as sacred as any of the Buddhistical Scriptures, are invested with much importance in a historical point of view, shewing clearly the correctness of Turnour's belief that the Buddhistical era was antedated by Mahánáma, or the early historians to whom he was indebted, to the extent of 60 or 65 years. They also intimate, consequently, a strong circumstance in favor of the genuineness of the work here noticed. But it must be borne in mind that this history bears date 2305 A. B. (which is 1762 A. D.) after the Dutch had introduced Christianity amongst the Siñhalese, and long after the Portuguese had made the natives acquainted with the history of Jesus Christ. From the language too, in which it is written (and which contains amongst other words the Portuguese word *kánu* instead of the Siñhalese *neun* for "ditch,") this appears beyond all manner of doubt to be what it does not disguise to represent—the production of a modern date. Whether, therefore, it is an invention of the Buddhists, a

"And when Wasawarti Mára saw that king Milindu had thus set aside his two and sixty artifices, and his established moral and ceremonial customs, he reflected thus : ' King Milindu

fabrication of the Buddhist priesthood, to bring contempt on our holy Religion is a matter well worthy the attention and investigation of Oriental Scholars to whom, and to the Asiatic Society in particular, I am prepared to submit an English translation in MS. of this little work. Opposed, however to such a supposition is the undeniable and well-known fact, that Buddhists look upon Christianity without jealousy,—nay more, that there is a disposition on their part to conform to Christianity along with Buddhism. The Rev. D. J. Gogerly says, in a paper printed in Sir E. Tennent's work on Christianity in Ceylon, p. 240 :—"I have seen it stated in a controversial Tract written by a Buddhist priest of Matura, not fifteen years since, that probably Christ in a former state of existence was a God, residing in one of the six heavens (a position which they represented Gautama as having occupied immediately previous to his birth, as Buddha); that animated by benevolence he desired and obtained a birth as man, and thought truth so far as he was acquainted with it." Nor is this a creature of modern and enlightened times. So far back as the age of the great Asoka, the liberal monarch of Asia, we find that far from any hostility being shewn to other religions, Buddhists actually honored them. Thus, in one of the Inscriptions of that Buddhist sovereign we find it declared (See Max Müller's *Buddhism and Buddhist Pilgrims*, p. 23,) that "there are circumstances where the religion of others ought to be honored. And in acting thus, a man fortifies his own faith, and assists the faith of others. He who acts otherwise, diminishes his own faith and hurts the faith of others." See also Huc's *Tartary, Thibet and China*, p. 210.

The following concluding passage, contains important data for the elucidation of Ceylonese and Indian history. "This is the history of the Tirtaka. \* \* He is called by the Tamils *Nasarinn* (Nazarine); by the Sinhalese *Tirtaka*, \* \* a religious Teacher; and by others *Kirsta* (Christ). He was born 485 years after the death of Buddha, the teacher of the three worlds. King Milindu entered upon his dialectic controversies in 490 A. B. Those controversies lasted nine months and nine days: at the termination of which the king became a convert to Buddhism, entertained Nágaséna, and 80,000 priests for 12 years. In 513 A. B. the Carpenter's Son was killed and buried. At this time by reason of an innocent Brahman female having been killed, there was a famine for 12 years. [This event, as detailed in the *Rasavahini*, a Pali historical record, serves to confirm the dates here given.] During this period Valagám Báhu reigned at Anurádhapura in Laṅkā and erected 99 monuments and edifices. Two years and four months before the famine, which is called the *Beminiṭṭi sēya*, two Priests from Laṅkā went to worship the great Bó, and visited the various places in the five and thirty cities in which Buddha had dwelt. During this pilgrimage was the famine, called *Beminiṭṭi sēya*. They next proceeded to Sagal, and there were 80,000 Priests in the four Temples of that city.

They having heard the renown of Laṅkā in respect of the Buddhist religion established in it, were highly delighted and expressed their gratulations. The two priests who went over were kindly treated by them. After the expiration of the 12 years, during which the famine had lasted, a body of Priests came to Ceylon on a religious mission from the countries of Mallawa, Gandára, Aramana, Pygma, Pelalup, Rakkadu, and Sagal. They rendered much service to the religion of Buddha, by elucidating his doctrines, and by the compilation of books concerning his *dharmma*. At that time these two histories, viz., one relating to Milindu, and the other regarding the Tirtaka of a Carpenter's Son, were brought



has locked up the four hells which exist for my spiritual support, and has also set aside my two and sixty hidden (unrevealed) devices, (artifices)'; and summoned before him a son (a being) of Vasavarti, and said unto him, 'You were first defeated by doctrinal disputations with Milindu, the son (a deva) of *Nirmánaratiya* heaven, and other heavenly beings were likewise defeated by him. He has subjugated all the six heavens. He also entered into a controversy with a deva of *Yama*. Him also he has defeated. Since then *Nágaséna* has vanquished the six heavens by defeating Milindu. By reason of our having originated the disputation, he is incensed against me; and with a view to destroy my sixty-two devices, he has departed to the human world, where he is born by the name of Milindu. He now reigns in the city of Sagal, as the supreme monarch over a hundred kings of Dambadiva. Since therefore you were first defeating by him in controversial disputations, go and be born in the midst of the city of Sagal, and in the womb of a female of the low Carpenter's caste. And when you shall have grown up, be you Monarch over the whole of Dambadiva. Snatch away the sceptre of Milindu's kingdom. Open the gates of the four hells, which exist for the support of my existence; and uphold and protect my two and sixty secret devices, which shall last for ever and ever. (*lit*: during the entire *kalpa*.)' Upon this injunction of Vasavarti Mára, the Mára-son came down from the heaven called *Parasermitu-vasavarti*, and at midnight was conceived in the womb of a female of the Carpenter's caste in the city of Sagal."\*

---

down by the aforesaid two priests on their return to Lanjá. It is now (the date of the writing) 2305 years after the time of the great Buddha."

\* A similar story is given in the "*Milindapprasna*," as to the birth of *Nágaséna*. "At the intercession of Assagutta Terinnánsé, on behalf of the Buddhist priesthood generally, Indra, the supreme of the Devas, invoked *Nágaséna*, who was in the *Ketumati* heaven, and called *Mahá-sena*, to be born in the human world, for the purpose of confuting Milindu, to which *Nágaséna*, after much hesitation, consented. Accordingly he was conceived in the womb of the wife of Sonuttra, a Brahman, and an inhabitant of Kajangala, on the borders of the Himanta mountains."—*Milindapprasna*.



Māra is called *Kāma dévó*, or "god of pleasure," by Kosma Kōrōsi in his Tibetan Annals. We are unable to find the authority for this in any of the works on Buddhism extant in Ceylon; but it is a fact most of the names given to the Siṅhalese Cupid, or *Kāma déva*, are also given to *Māra*, which name signifies "death," or "destroyer." It also is remarkable that Māra's three daughters, who were dispatched to tempt Gautama, are called *Raṅga*, "dance," *Taṇhú*, "love," and *Rati*, "sensuality"; the last name being also given, according to the Hindú Fabulists, to the consort of the Indian Cupid, whence he is called *Riyahimi*. Since he is identified with Māra, commonly surnamed *Vasavarti*, from the appellation given to the heaven of which he is an inhabitant, it may be convenient to notice here a few particulars regarding KAMA DÉVA.

He is represented as *Anaga*, or "bodiless." This is either metaphorical as to his influence on the mind, or with reference to the legend of his having been reduced to ashes by the anger of *Siva*, when pierced by *Kāma's* arrows, and thus inspired with love for *Parvati*.<sup>\*</sup> Referring to the last mentioned circumstance, he is called *Maru*, "destroyer;" *Ma-anga*, "dead body;" *Vasam-sera*, "unequal body;" and *Un-aga*, "deficient body." Regarding him as a creature of the mind, he is *Mana-yon*, † "mind-born;" or *Naraka*, "human body." He is the embodied form of the god of gods, whence he is called *Tunu-hiru*, "body of sun's splendour." He is the agitator of the hearts of Bráhma, Viṣṇu, Siva, and Indra, and is thence called *Samara*, "the warrior." He inflames the minds of men for sensual pleasures, and is therefore called *Mada*, or 'intoxication': in reference to which Kálidasa in the following beautiful lines in his *Sakuntalá*; sings:

<sup>\*</sup> Hindú Plays, ii. p. 21. Also see Prof. Monier Williams' *Sakuntala*, p. 101.

† Having offered adoration to the mind-born divinity, let the wife worship her husband with ornaments, flowers and raiment, thinking internally with entire complacency 'This is the God of love.'—The Purānas.

අදාපිත්තං. රුක්කාපව්‍යං නිඤ්ඤා; තවසිපවලකොංචිඉදාබුරා කො  
තවමනාථා මන්තවමදවිධානාං; ගස්මාවගෙහො කාච්ඡවමුණො:

“Verily even now the fire of Siva's wrath burns in this like the submarine fire in the ocean: otherwise how couldst thou, O agitator of the soul! with nothing left but ashes, be so scorching towards such as me?” Ananga is represented, like his Grecian parallel Eros, with a bow and arrow. The description of these weapons in our books is truly beautiful: the bow is a sugar-cane, (whence the appellation of *Siya-sew*, or a “creeper-bow,” sweet in its taste, and lovely in its appearance; the bow-string is made of a line of bees, those lovely denizens of the forest, who sip the liquid sweets of flowers; and the arrows are five in number (*pan-sēra*), each tipped with a flower. Hence the name *Mala-viya* or *Kusum-dunu*, “flowery bow,” which the poet describes in the following lines:—

කමන්තෝ ඉද්දමගෙහල් අමකුසු	ම
මෙවන් පසාරකදකන ගාකරනුයු	ම
රොසින්මේඞු විසසොවමන් ගනිඅන	ම
කෙසින් රමේයු යුදගව පාලමෙයි සර	ම

The five species of flowers here described are: the white dazzling *Jasmine*, the matchless *Asōka*,\* the unspotted *Idda*, the far-famed *Maha-nel* (*Lotus. Nelumbium speciosum*), and the odorous *Mango*.† They are also given in the following passage in the paraphrase to the *Amara Kōsha*:—

අරවින්දමකෝකවඩුකවකවමල්ලිකා, උත්පලන්චේතිපං. මෙවෙත  
පවබානකාසායකා:

and are different from those enumerated by a Singhalese poet in the following line:—

පිවම කොමද නිත දෙම මෝ ලිද්ද මේමල් කැරපඤ්ඤ.  
which are the *Jasmine*, *Idda*, *Kina*, *Domba*, and *Bōlidda*.

\* This is the *Jonesia Asōka*, which is represented as producing a very lovely flower, and it is supposed that the contact of the stem of the *Asōka* tree with the foot of a woman of superior beauty, makes it blossom.

† It is believed, (and I here speak upon the authority of Mr. W Ferguson), that the tree which produced the balm of Gilead in the Scriptures, *Bdelium*, *Myrrh* and *Incense* or *Frankincense*, are the produce of the same natural order of plants to which our *Mango* belongs.

Sir William Jones differently describes them in the following beautiful lines, giving a description of the *mal-sēra* or "flowery darts" of Cupid.

"He lends the luscious cane and twists the string,  
With bees how sweet, but ah! how keen their sting.  
He with five flow'rets tips the ruthless darts,  
Which through five senses pierce enraptur'd hearts :  
Strong *Champa*, rich in odorous gold,  
Warm *Agra* nursed in heav'nly mould ;  
Dry *Nagaser* in silver smiling ;  
Hot *Criticum* our sense beguiling,  
And last to kindle fierce the scorching flame,  
*Love shaft*, which gods bright *Bela* name "

The Eastern Cupid bears upon his banner the *Makara*, an aquatic monster like a fish ; and in the *Makara-dvaja*,† Dissa-nayaka describes him as a "fierce warrior, approaching to battle."—

මත්ගතිසරත්සදසතනිමරදිරද රා  
කොත්බැදමුටරසිසුගොසකරපසතතු රා  
සත්පිමකොටුළුක්දසුගෙනතබරසා රා  
විසවනිපුදටමබැතරුදුරුපත්සා රා

"Mounted on the elephant of darkness—holding the umbrells of Autumn, hoisting the banner of *Makara*, ‡ enjoying the music of the bellowing seas ; playing the lute (chank) which produces the *kōkū*'s (cuckoo's) notes, and holding the sugar-cane bow with lotus darts."

According to one of the *Purānas*, the worship of *Kāma* was instituted by *Sīva*, in pity of the fate to which he had

\* "In the *Romaunt of the Rose* there is something of a similar allegory ; Cupid is armed with 'ten brade arrows,' of which 'five were shaven well and dight,' and of a nature to produce virtuous attachment ; while the other five 'also black as fiend in hell' were *Pride*, *villaine*, &c., and of pernicious properties."—*Wilson's Mēgha Dūta*.

See various descriptions of 'the five flowers,' in Professor Williams' *Sakuntala*, note at p. 100.

† Literally "Fish-banner," the name of a poem.

‡ Although the name signifies a 'fish' and its representation in the Indian Zodiac has a resemblance to the *Pisces* of the western Astronomers ; yet I cannot help thinking that this is the crocodile of Egyptian worship. The *Makara toraṇ* over porches in Buddhistical temples clearly prove this to be a crocodile. Professor Wilson describes the animal as "monster," which doubtless it is, judging from the representations given of it in Buddhistical Temples.

consigned him. This is represented to take place in a grove of *Aśoka* trees, where Kāma incurred the wrath of the three-eyed god. Although Europeans have frequently dwelt upon the want of affection in the matrimonial relations amongst Asiatics, it is nevertheless a fact, that they are much attached to their wives, who reciprocate the feelings of love to an extent even unknown in the fictions of the west. Various passages may be cited from the books illustrating this position ; but one will suffice from a Hindú poet, who thus feelingly describes the lament of Uma, when Kāma was blasted by the lightning of Siva's scorching eye : — “ She swoons ” ; but

Too soon her gentle soul returned to know  
The pangs of widowhood,—that word of woe !  
‘ Speak to me Kāma ’ ! why so silent ? give  
One word in answer,— doth my Kāma live ?  
There on the turf his dumb cold ashes lay—  
That fiery flash has scorched the soul away...  
Sure woman's heart is strong, for can it be  
That I still live while *this* is all of thee ?

A remarkable passage occurs in the *Buddhavaṇsa*, in which three of the divinities to whom we have already alluded, are compared to Gautama, upon his first appearance in public, after attaining the position of the Great Teacher. I extract it entire :—

“ Among themselves these people kept saying one to another, ‘ Friend who is this ? can it be the full moon descended among us out of dread of *Rāhu*, concealing the rays with which he is endowed ? such a one was never seen before.’ Smiling at his suggestion, another said, ‘ This is the god of love with his floral banner ; dignified in person he has come to revel among us, having observed the great personal beauty of our monarch and of our fellow-citizens.’ Laughing at him, another said, ‘ Friend, art thou mad ? the god of love has half of his body destroyed by the fire kindled by the jealousy of Iśo (Siva), it is not he, it is the chief of the déva, the thousand-eyed deity (Indra) who has come here, imagining that this is the celestial city.’ Another again, playfully ridiculing him, said, ‘ Friend, what nonsense art thou talking ! where are his thousand





*Amrat* or "Ambrosia," at the churning of the ocean. Hence Ráhu's enmity to those planets, whom the Buddhists believe are periodically seized upon by Ráhu to avenge the part they are said to have taken in the detection of his theft.

The names of this Déva, as of other deities, are descriptive. He is *Vas-dew*, "the son of Vása-déva," and *Uvindu* "ranks next to the chief *deva*." He is *Kamal-kal* or *Siri-piya*, the husband of *Laksmi*. He has *Siw-ba*, "four arms;" *Piyum-net*, "lotus eyes;" *Damóra*, "a sash round his belly;" *Hem-salu*, "a golden mantle" on his body; *Sak-pana*, "a ring" in one hand, and "a conch shell" in the other; and *Piyum-neba*, "a lotus navel." This last designation was owing to the part Vishnu had taken in the reconciliation between *Parvati* and *Mahadeva*, who found their concurrence essential to the perfection of their offspring. This was so far recognized by the Egyptians and the Greeks, that the former, we learn from Wilford's Essay on Egypt, had 'a vast *umbilicus* made of stone,' in their Temple of Jupiter-Ammon; and that the latter kept an *umbilicus* of white marble, at Delphi, in the sanctuary of the Temple, where it was carefully wrapt up in cloth. He is represented as being *Kalu* or *Nilāṅga*, 'blue;' and as *Gurulu-dala*, "riding on a *Gurulu*," between whom and the serpent race is a deadly feud, originating in a dispute between their respective parents *Kadru* and *Vinata*; the wives of *Kasyápa*. In a Hindú legend (as in the following extract from the *Budugunālaṅkára*,)

ගත් සකඳු අතට, පන්දිවතුරු එ සහන	ට
වැද සමුද්‍රරිද්ධට, සැතපිනනාදරනවැලප	ට .

he is described, as

"pillowed on his snake-couch mid the deep."—*Muddra Rakshasa*.  
and as

reposing upon the thousand heads of *Sishu*, amidst the waters by which the earth is overspread.

The story, in reference to which he is called *Govindu*, or 'chief of herdsmen,' is thus narrated by Miss Spier, in her "Life in Ancient India," p. 466.

“At the conclusion of the rainy season, when the skies were bright with stars, the herdsmen were busily engaged in preparing a sacrifice for Indra; but Krishna, resolving to put the king of the celestials into a passion, persuaded Nanda to worship mountains and cattle, and have nothing to do with Indra. ‘Kine,’ he said, ‘are our support; we have neither fields nor horses; we wander about happily where we list, travelling in our waggons; we are then bound to worship the mountains, and cattle, and have nothing to do with Indra.’ Offerings of curd milk and flesh were in consequence presented to the mountain, and the worshippers circumambulated the cows and bulls, who bellowed as loud as roaring clouds. Indra’s anger broke forth in a furious tempest, which lasted seven days and seven nights, but Krishna protected the distressed community by plucking up the mountain, and holding it aloft as an umbrella until the tempest ceased, when he planted it again on the earth. Upon witnessing these marvels, the herdsmen wished to render worship to Krishna, but he desired them not to inquire into his nature, but to be contented that he lived among them as a *friendly relative*.”

Hence the appellation of *Diya-banda*, given to this déva by our poets.

In the churning of the ocean, Vishnu seems to have taken an active part. It was undertaken by his advice, and with his assistance to recover *Śrī*, whom Indra lost under the following circumstances. A sage named Durwasas gave to Indra a garland, which the latter, without attaching to it much value, threw at his elephant, and he to the earth. Offended at this sight, Durwasa cursed Indra, and pronounced that the latter should lose *Śrī* or ‘goddess of prosperity,’ who reigned supreme in the several heavens appertaining to that déva. She accordingly disappeared; and the consequence was, that the world fell into decay, sacrifices ceased, and the gods were enfeebled. To avert further evil consequences, the ocean was churned to find her.\* At this search by dévas, demi-gods, (who are sometimes designated *dévatās* and demons,) various things and persons were found. They are called *Ratnas* or ‘gems,’ and are enumerated to have been *Danavantari*, the physician of the gods; *Lakshmi*, the goddess of beauty; the *Apsarases*, or

---

\* Pr. Wilson’s *Vishnu Purāna*.



nymphs of Indra's heaven ; *Sura*, the goddess of wine ; the *Moon*, said to be the jewel worn by Krishna ; *Sura-taru*, or the wish-conferring tree ; *Surabi*, the cow of abundance ; *Airāvata*, the elephant of Indra ; the bow of Vishṇu ; his *Sankha* or shell poison ; and *Amrita*, or Ambrosia.

The origin of the *Apsarasas*, from *ap* 'water,' and *sara* 'to move,' is thus related in the *Rāmāyana* :—

Then from the agitated deep upsprang  
The legion of *Apsarasas*, so named  
That to the watery element they owed  
Their being. Myriads were they born, and all  
In vesture heavenly clad, and heavenly gems :  
Yet more divine than native semblance, rich  
With all the gifts of grace, and youth, and beauty.  
A train innumerable followed : yet thus fair  
Nor God nor demon sought their wedded love :  
Thus *Rāghava* they still remain—their charms  
The common treasure of the host of heaven.

The poison which was generated as above described was swallowed by *Śiva* ; and the blueness of his neck has been the consequence. The moon is supposed to be the repository of the *Amrita* or "ambrosia." "It is" says the *Vishṇu Pūraṇa*, "replenished from the sun during the fortnight of the increase. On the full moon the gods adore that planet for one night, and from the first day, all of them, together with the *Pitris* and *Rishis*, drink one *kālu* or "digit" daily, until the ambrosia is exhausted." In the *Hero and the Nymph*,\* the poet says :

Hail glorious lord of night, whose tempered fires  
Are gleaned from solar fountains.

This is in accordance with the Western notion, which is thus described by Milton :

"The neighbouring moon her monthly round  
Still ending, still renewing, thro' m d heaven,  
With *borrowed light* her countenance triform ;  
Hence fills and empties to en'lighten the earth  
And in her pale dominion checks the night."

---

\* *Hindū Plays*, i. p. 220.

To return however to the subject of the remarks:—Vishṇu is worshipped by the Buddhist as a déva whose name is hallowed by historical and religious associations; whilst the Hindús treat Buddha as an *avatár* or incarnation of Vishṇu. The story in the Puránas, is thus related by Wilford, in his *Essay on Egypt and the Nile*.\*

“The Daityas had asked Indra, by what means they could attain the dominion of the world; and he had answered, that they could only attain it by sacrifice, purification, and piety: they made preparations accordingly for a solemn sacrifice and a general ablution; but Vishṇu, on the intercession of the devas, descended in the shape of a *Sannyási*, named BUDDHA, with his hair branded in a knot on the crown of his head, wrapt in a squalid mantle, and with a broom in his hand. Buddha presented himself to the Daityas, and was kindly received by them; but when they expressed their surprise at his foul vesture, and the singular implement which he carried, he told them, that it was *cruel, and consequently impious to deprive any creature of life*; that, whatever might be said in Vedas, every sacrifice of an animal was an abomination, and that purification itself was wicked, because some small insect might be killed in bathing or washing cloth; that he never bathed, and constantly swept the ground before him, lest he should tread on some innocent reptile: he then expatiated on the inhumanity of giving pain to the playful and harmless kid, and reasoned with such eloquence, that the Daityas wept, and abandoned all thought of ablution and sacrifice. As this *Máyá*, or ‘illusive appearance’ of Vishnu, frustrated the ambitious project of the Daityas, one of Buddha’s titles is ‘the son of *Máyá*.’ He is also named *Saya Síṃha*, or, ‘the lion of the race of Sakya.’”

It is probably upon the belief of Gautama being an incarnation of Vishṇu, that the Hindús regard the superficial hollow on Adam’s Peak, as the impression which that déva left by stamping the mountain with his foot.† But I may remark, that even intelligent Buddhists of the present day ignore the statement in one of their religious books,—I believe the *Sadharmálanakára*—“that Gautama left the print of his foot as a seal, to declare that Laṅká would be the inheritance of Buddha.”

---

\* Sir William Jones’ works, ii. p. 577.

† Spence Hardy’s “Eastern Monachism,” p. 277.

I have already referred to the distinguished position which Vishṇu holds in the national religion of the Siṅhalese; and I may, before concluding, observe, that our poets abound in allusions to this deity, and one of them especially regards him as the only déva 'who was not dejected when Māra waged his fight against Buddha, as he sat on his *wajrāsana* or diamond seat.'

අමාආඥරුලන්තදවිදුරසුන්ම	තු
සමායෝජ්ජාමයොනසුදව්වසව	තු
තමාමසැව්බලසාසිට්ඨොබාසි	තු
මෙමාවතනුකිමමොක්කතෙදබලආඡු	තු



## A STATISTICAL ENQUIRY INTO THE STATE OF CRIME IN CEYLON.

BY JOHN CAPPER.

---

### PART I.—THE WESTERN PROVINCE.

THE amount and character of Crime existing in any country, is a study of so much importance, as to be well worthy the researches of the Statist and the Political economist. This is especially the case amongst a people who, like the natives of this island, are in a transition state ; governed by laws dictated by the civilization of the West, yet dwelling amidst, and deeply imbued by the customs and superstitions of the East.

It is to be regretted, that in Ceylon, as in many other parts of India, the materials for statistics exist in a very crude and defective state, especially those relating to population. At the same time, it may be observed, that native society in this island exists in such widely different forms from the condition of any European communities, and the springs of action affecting their good or evil conduct are so dissimilar, as to render it far less necessary to enter into the very minute statements and comparisons as regards this branch of enquiry, which are to be found in works on the criminal statistics of European countries.

The scattered nature of the Ceylon population, the primitive habits and limited wants of a larger portion of the people, the absence of any densely populated towns, the cheapness of food and clothing, the facility with which a livelihood may be obtained, and the consequent small extent of pauperism, are all circumstances so widely different from

those existing in Europe, and so opposed to the existence of crime, that one naturally looks for figures shewing a highly favorable result as compared with almost any other part of the world.

Taking the total number of convictions on an average of three years, as found in the Western Province, to which portion of the Island I am at present confining my inquiry, and comparing these with the extent of population, we find, to our astonishment, that the result is most unfavorable to the Island, as compared with similar returns from British India or the parent country. In Scotland, it appears that an offence against the laws is committed annually by one person in each 1,294 of the entire population; in England and Wales, by one in 929; in Ireland, by one in 582; in Bengal, by one in 1,219; whilst in the Western Province of Ceylon, an offence is committed yearly by one person in each 264.

But, startling as these figures appear, the case of Ceylon is very far from being an unfavorable one, if we proceed to analyze the returns, as I shall presently. As regards Bengal, and indeed British India generally, although I have alluded to the criminal statistics of that Government as officially published, I must explain, that there does not anywhere exist a faithful statement of the extent and nature of crimes and offences committed in any of the Presidencies, and least so in that of Bengal.

It is not generally known, out of India, that a very considerable number of offenders are dealt with in a summary manner by Indigo Planters and native Zemindars or landholders, who regularly hold courts of justice at their factories and dwellings. Not only do the riots of their own lands bring to their courts the offenders of their villages, but cases frequently come to them from more distant places. The evidence is taken by them with as much regularity, and far more fidelity, than in the Company's courts, and punishment is awarded without any hesitation on the part of the judge, on any complaint on the part of the people; from fifty lashes

usually administered on the spot, or two or three months' incarceration in the Factory Jail, down to a trifling fine, being about the range of the sentences.

I am not aware that any such instances of private administration of justice are to be found in any other part of the world; but so infamous is the conduct of the police of Bengal, and so corrupt the ordinary Company's courts, that a Hindú will frequently submit to anything rather than take his suit to one of them; and such is their horror of the police officials, that it is no uncommon occurrence, when a crime has been committed in a village, for the entire community to fly to the nearest jungle, rather than fall into the merciless hands of the darogah and his peons.

I believe, that the official returns of cases tried in Bengal do not shew above half of those actually taken to account; whilst the extent of undetected crime in India, must also be very considerable; and this should be borne in mind whilst instituting a comparison between the criminal registers of India and Ceylon.

I shall, in the present Paper, confine enquiries to the Western Province, hoping to complete it for the remaining districts of the Island in a future contribution. The following Table exhibits the operation of the Colombo sessions of the Supreme Court during the last six years :—

	Murder and Homicide.		Other offences against Person.		Offences against Property.				Other Offences.		Total.	
	Convicted.	Acquitted.	Convicted.	Acquitted.	With violence.	Without violence.	Convicted.	Acquitted.	Convicted.	Acquitted.	Convicted.	Acquitted.
1852	3	0	8	0	3	1	10	3	1	0	25	4
1853	6	7	2	4	7	3	15	4	3	3	33	21
1854	2	0	2	1	3	1	11	5	2	5	20	12
1855	7	7	4	6	10	10	4	6	2	0	27	29
1856	2	1	4	2	4	7	10	1	3	1	23	12
1857	7	1	5	4	7	3	13	1	2	0	34	9

The punishments inflicted in the above cases are shewn in the following Tabular Return :—

*Punishments awarded by the Supreme Court during six years ending  
December 31st, 1857.*

	Hung.	Transported for				Imprisoned for		Flogged.
		Life.	14 years.	7 years.	5 years.	3 years.	2 years and under.	
1852 ... ..	1	1	2	2	3	9	5	3
1853 ... ..	3	0	1	13	0	13	7	3
1854 ... ..	1	0	0	0	0	7	12	4
1855 ... ..	3	0	0	0	0	11	13	2
1856 ... ..	2	0	0	0	1	7	12	5
1857 ... ..	2	0	2	6	0	9	13	4

If we compare the Capital punishments in Ceylon with the total Convictions, we find them to be as 1 in 840, whilst in England the proportion is 1 in 650 ; in Bombay 1 in 2,827 ; in Bengal 1 in 2,878 ; and in Madras 1 in 3,236.

If we examine the records of this Court, and compare them with the Calendars of former years, with a view to ascertain the relative proportions of offences against the person and offences against property, at various periods, we shall find from the accompanying Table, that, whilst the former class of offences has sensibly decreased, the latter class has not increased in anything like the same proportion.

*Convictions by the Supreme Court in the Colombo Sessions at various periods, shewing the number of offences against Person and Property.*

	Offences against the person.	Offences against property.	Other Offences.
1834 ...	23	31	18
1835 ...	19	14	2
1841 ...	9	18	5
1842 ..	6	30	2
1856 ...	6	14	3
1857 ...	12	20	2

Taking the above three periods of two years each, we find the average result to be, that in the firstnamed period the offences were about equal, in the second period offences against property stood at  $3\frac{1}{2}$  to 1 against the person, and in the latter period at 2 against property to 1 against person. The latest returns I possess in reference to Crime in Great Britain shew, that for every offence against the person, there were in England and Wales 4, and in Ireland  $\frac{1}{2}$  against property, while in Bengal the relative numbers appear to be  $1\frac{1}{2}$  against property to 1 against the person.

From the first period to the last, it does not appear that the proportions of Convictions has shewn any increase, though the latter compares favorably with the middle period, as may be seen by the following Statement :—

	Cases tried.	Conviction.	Percentage of Convictions.
1834 ...	95	72	75
1835 ...	54	35	66
1841 ...	58	32	55
1842 ...	99	39	39
1852 ...	29	25	87
1853 ...	54	33	62
1854 ..	32	20	61
1855 ...	56	27	51
1856 ...	35	23	66
1857 ...	43	34	78

The average of the last three years is 65 per cent., omitting fractions ; of the middle period 47 per cent., and of the earliest period 70 per cent.

Turning from the labours of the Supreme Court to those of the District Courts of the Western Province, we find a considerable difference in the results on the records of each of them, arising chiefly from local causes. The returns in my possession extend over six years for the Colombo Court, but over only three for Kalutara and Ratnapura.



*Statement of persons tried and convicted in the District Court of Colombo, during six years ending December 31st, 1857.*

				Offences against Person.		Offences against Property.				Other Offences.		Total.	
				Convicted.	Acquitted.	With violence.		Without violence.		Convicted.	Acquitted.	Convicted.	Acquitted.
						Convicted.	Acquitted.	Convicted.	Acquitted.				
1852	...	...	...	5	0	0	0	7	7	8	8	20	15
1853	...	...	...	0	0	0	0	10	13	3	16	13	29
1854	...	...	...	0	0	0	0	12	27	9	4	21	31
1855	...	...	...	1	0	1	0	13	31	18	7	33	38
1856	...	...	...	0	0	3	0	10	29	13	16	26	45
1857	...	...	...	3	4	0	0	2	12	8	4	13	20

The capriciousness of the above totals, ranging, as the convictions do, between 60 and 30 per cent. of the cases tried, can only be explained by an analysis of the table. Adopting this course, we find that many of the cases consisted of contempts of Court, the offenders being generally dismissed with a warning as to future conduct. A considerable number in some years, were cases of Cattle stealing, an offence which has, since 1851, been removed from the jurisdiction of the Supreme Court, and made actionable in the District Courts.

The following Table of such cases, from the records of the District Court of Colombo, will shew the working of this alteration in the law.

*Cattle Stealing Cases in the Colombo District Court for the six years ending December 31st, 1857.*

	Persons charged.	Convicted.	Acquitted.	Withdrawn or dismissed.
1852	12	5	4	3
1853	23	10	12	1
1854	32	8	22	2
1855	42	13	9	20
1856	17	9	7	1
1857	10	2	8	0

The average of convictions in these cases, amounts to but 35 per cent., and it cannot fail to be observed, that whilst in the few last years, the convictions have materially decreased, the cases withdrawn and dismissed, owing to the non-appearance of prosecutors, have been greatly increasing. The above Table would induce us to believe, that the offence indicated was on the decrease; but, unfortunately, there is reason for knowing the contrary to be the case. It is urged, that since this class of offenders ceased to be prosecuted by the Queen's Advocate before the Supreme Court, they have become far more daring, relying with confidence on the delays and difficulties attending prosecutions in the District Court by private parties. The numerous withdrawals and dismissals indicate the degree of impunity which they are enjoying; and it may be well worth the consideration of the authorities, if it would not be advisable to instruct the several Deputy Queen's Advocates to take all such cases out of the hands of private prosecutors, and follow them up with the utmost vigour.

The next returns are those from Ratnapura and Kalutara, the figures of which differ very materially, though, on examination, the varying results may readily be accounted for by the peculiarities of the two Districts. Kalutara, it must be remembered, is the great centre of Arrack distillation, and we must not be surprised at finding a certain class of cases preponderating in the Court of the District.

*Return of Persons convicted and acquitted, or dismissed, in the District Court of Ratnapura, for three years ending December 31st, 1857.*

				Offences against Person.		Offences against Property		Cattle Stealing.		Other Offences.		Total.	
				Convicted.	Acquitted.	Convicted.	Acquitted.	Convicted.	Acquitted.	Convicted.	Acquitted.	Convicted.	Acquitted.
1855	...	..	...	0	1	0	0	1	1	1	0	2	2
1856	...	...	...	2	0	1	0	1	9	3	1	7	10
1857	...	...	...	0	1	2	2	4	1	4	0	10	4

In this instance, the convictions have run tolerably even, the preponderance of the acquittals having been, as in most other courts, in cattle cases. The average for these three years shews the convictions to have amounted to no less than nearly 55 per cent. of the persons charged,—a very favorable result, as compared with other Courts in this Province.

*Return of Acquittals and Convictions in the District Court of Kalutara,  
for the three years ending December 31st, 1857.*

				Offences against Person.		Offences against Property		Cattle Stealing.		Other Offences.		Total.	
				Convicted.	Acquitted.	Convicted.	Acquitted.	Convicted.	Acquitted.	Convicted.	Acquitted.	Convicted.	Acquitted.
1855	...	..	...	0	10	0	1	4	11	1	1	5	23
1856	...	...	...	2	3	0	2	3	35	1	37	6	77
1857	...	..	...	2	2	1	6	1	28	0	5	4	41

It will be at once apparent, that the cases brought into this Court are much more difficult to deal with than in other instances. The habits of the people go far to account for the difficulty the authorities meet with in obtaining convictions, which here have not averaged above 10 per cent. during the three years under notice. The greater number of persons accused of "other offences," have been charged with rioting.

The Police Courts will now claim our attention ; and first amongst these, both in importance and amount of work performed, is the Colombo Magistrate's Court. The Table below shews the number of Police cases instituted and decided in each of the last 6 years in this Court.

		Cases Instituted.	Cases Decided.	Convictions.	Acquittals.	Dismissals.	Percentage of		
							Convictions.	Acquittals.	Dismissals.
1852	...	3899	3750	1455	180	2115	39	5	56
1853	...	3961	3927	1386	165	2376	35	4	61
1854	...	3469	3813	1327	163	2323	36	4	60
1855	...	3839	3906	1437	166	2303	37	4	59
1856	...	3627	3367	1270	121	1976	38	3½	58½
1857	...	3968	3423	1228	130	2065	36	4	60

The regularity of the results in these 6 years, is most satisfactory evidence of the steady administration of justice ; for although the amount of work performed in the various years differs by five or six hundred cases, the proportion of convictions and acquittals remains unvarying. The large proportion of dismissals, amounting on an average to 59 per cent., indicates a great disposition amongst the natives to bring forward false and frivolous charges, engendered by ill feeling, arising from imaginary or real wrongs. On the other hand, very many of the dismissals are cases of simple disputes and quarrels between members of a family or neighbours, which are thus arranged by the Magistrate, accompanied by a reprimand and warning as to future good conduct.

The records of the Negombo Police Court shew a still larger proportion of dismissals, though a considerable number of these will be presently accounted for in a different manner.

The following are the figures in their case :—

							Percentage of		
							Convictions.	Acquittals.	Dismissals.
Cases Instituted.	Cases Decided.	Convictions.	Acquittals.	Dismissals.	Convictions.	Acquittals.	Dismissals.		
1853 ... ..	1425 1224	287	166	771	23½	12	64½		
1854 ... ..	1087 1055	212	84	759	20	8	72		
1855 ... ..	4292 3049	255	87	2707	8	2½	89½		
1856 ... ..	3855 4548	253	98	4197	5½	2½	93½		
1857 ... ..	1452 1869	182	74	1618	10	4	86		

The figures in this table shew a great irregularity during three of the years under review, though in the first and last of the period, the numbers agree precisely with each other. An analysis of the records of this Court goes to shew, that the great increase in the number of cases brought forward in 1855 and 1856, arose entirely from the District collectors under the Road Ordinance taking out summonses against persons liable for the annual tax, without troubling themselves to demand payment in the first instance; thus endeavouring to make the Police officials the means of collecting the tax instead of themselves. The Magistrate, however, refused to entertain most of these charges; hence the unusually large number of dismissals, and the apparent small percentage of convictions during those years. This practice was eventually put a stop to through the interference of the Government Agent, and the cases have once more sunk to their accustomed number.

In the Kalutara returns for three years, ending December 31st, 1857, we find a considerable falling off in the number of decisions, as well as in the convictions, during the last year embraced by them. The results are shewn in the accompanying Table :—

	Cases Instituted.	Cases Decided.	Convictions.	Acquittals.	Dismissals.	Percentage of		
						Convictions.	Acquittals.	Dismissals.
1855 .. ..	2157	2278	300	152	1820	13½	6¾	79¾
1856 . . .	2290	2309	304	175	1830	13	7½	79½
1857 ... ..	2075	1900	173	101	1626	9	5¼	85¾

Much as these figures differ from the result of the Colombo Tables, they perhaps do not shew any greater discrepancy than might be anticipated from the different positions of the

two Courts. The above figures, too, are borne out by the returns from the Kégalla Police Court, as may be seen below :—

			Cases Instituted.	Cases Decided.	Convictions.	Acquittals.	Dismissals.	Percentage of		
								Convictions.	Acquittals.	Dismissals.
1855	...	...	932	1041	121	77	843	11½	7½	81
1856	...	...	1073	1087	106	96	855	9½	9	81½
1857	...	...	857	792	97	55	640	12	7	81

The convictions and dismissals, in both these instances, approximate very closely ; and we may fairly presume, that the much smaller proportions of convictions in these rural Courts arises, not from any local defect in the administration of the laws, but rather from a less efficient Police, and a greater difficulty in collecting evidence amongst scattered and distinct communities.

The last of these Courts is that of Ratnapura, the work in which, during the last three years, is given in the annexed Table :—

			Cases Instituted.	Cases Decided.	Convictions.	Acquittals.	Dismissals.	Percentage of		
								Convictions.	Acquittals.	Dismissals.
1855	...	..	891	678	90	32	556			
1856	...	..	763	1090	165	148	777			
1857	..	..	866	820	75	50	695			

If we now sum up the total crimes and offences on which convictions have been obtained throughout the Western Province of Ceylon during the last three years, and examine the proportion which these bear to the population, we shall be able to form an estimate of the relative criminality of this

as compared with other countries. The annual averages of these convictions in the various Courts stands thus :

Convictions. per cent. of cases.			
Supreme Court ...	28	=	65
District Court, Colombo ...	24	=	24
Do. Kalutara ...	5	=	50
Do. Ratnapura	6	=	55
Police Court, Colombo ...	1311	=	37
Do. Negombo ...	230	=	20
Do. Kalutara ...	261	=	12
Do. Kégalla ...	108	=	11
Do. Ratnapura ...	110	=	12

The total of all these averages gives us the annual number of 2,082, which, as I before stated, yields a proportion of one in each 264 of the entire population of the Province.

Unfavorably as this result contrasts with the statistics of other countries, it assumes a very different aspect, if subjected to analysis ; and separating crimes from mere offences, we draw a comparison between Ceylon, India, and England, as regards these two classes of offenders. The result will then be altogether in favour of Ceylon, as respects real *crime* though still leaving a heavy balance of mere offences against the population of this Island. This analysis shews, that while there is but one person in every 13,419 who yearly commits a crime, there is one person in each 269 inhabitants who annually commits an offence : crimes standing in the small proportion of  $2\frac{1}{2}$  per cent. of all offences against the laws. In Bengal, crimes and offences are about equal. In England and Wales, they stand as 15 per cent. of crimes. In Ireland as 27 per cent.

Comparing the total convictions in all the Courts of this Province on an average of three years, with the number of

cases decided, and as compared with the English and Indian tables of convictions, we shall find them standing as follows :

Supreme Court,	65 per cent.
District Courts,	29 „
Police Courts,	20 „
Average of all,	38 per cent. of cases tried.
Bengal,	48 „
England,	64 „

There is no doubt, that the same cause which leads to the excessive preponderance of offences of a minor character, as compared with the population, when viewed against other countries, goes far to account for the smaller percentage of convictions, especially as we find the least percentage in the Police Courts, where this description of cases is dealt with. Whilst we may congratulate ourselves upon the very small amount of actual crime existing in Ceylon, judging from the statistics of the Western Province, we must admit the prevalence of much strife, dissension, and angry broils amongst the natives, arising partly from quarrels respecting the minute shares into which landed property is frequently subdivided, and partly from the vice of drunkenness, a propensity which, it is to be regretted, is greatly on the increase in many parts of the Island, but especially in the Western and Southern Provinces. It is quite impossible to institute any faithful comparison between the large number of frivolous charges instituted and dismissed in this and any other country, nor between the many Police cases, arising out of family and neighbourly disputes, of a trivial character, in which both sides being equally blameable, the Magistrate can do no more than dismiss them with a reprimand and caution to either party.

There is very little doubt, though the Police records fail to shew such to be the case, that by far the larger portion of feuds and petty assaults have their origin in the neighbouring tavern. The personal experience of Police officials and



Magistrates tends to prove this; and confirmation would appear to be found in the following Table, in which I have compared the number of taverns licensed in, and the arrack revenue derived from the various divisions of this Province, with the population and the number of Police convictions.

District.	Population.	Taverns licensed.	Proceeds of Arrack Rent.	No. of Inhabitants to each Tavern.	Amount of Arrack Rent paid by each person.	Police Cases to each 1000 Inhabitants.
Colombo .. ..	42,810	73	£18,317	882	s. d.	20½
Salpiti Korale ..	41,910	38		1,187	4 3	
Sina and Hewagam Korales ..	97,488	120	3,937	805	0 9½	
Pasdum, Raygam, and Wewelwilla Korales, including Kalutara and Panadure ..	115,623	196	1,533	590	0 3½	18½
Three and Four Korales ..	61,591	124	3,830	520	1 3	15½
Alut Kuru and Hapitigam Korales ..	104,842	61	5,751	650	1 0½	13½
Ratnapura .. ..	82,921	54	938	1,720	0 8½	1½

The above figures are averages of the last three years, and from these it may be seen that, to a great extent, the Police cases bear a relative proportion to the density of the tavern licences, and still more so to the amount contributed per head to the Arrack rents; the largest contributors to this branch of the revenue being also the most frequent visitors to the Magistrate's Court.

There is, indeed, a striking exception to this rule, in the case of the Kalutara and Panadure Division, where, although the proportion of licensed taverns and the number of Police cases agree, as in the other instances, we find the revenue per head the lowest in the scale. The only way in which we can account for this discrepancy is, by supposing that in this District, which is the great centre of arrack distillation, there

are large surreptitious sales of the spirit, which militate against the price paid for the arrack rents ; otherwise it is difficult to conceive, that a District which stands second on the list, as regards the number of taverns to the population, should yield less than half the amount per head than any other division of this Province.

I find that the number of stills licensed in the Western Province has been gradually on the increase, having been in 1854, 196 ; in 1855, 290 ; in 1856, 332 ; in 1857, 244 ; and in the first five months of this year, 339. This increase is, however, attributable to the larger demand for arrack for exportation to the Presidencies and the Colonies, rather than to any greater local consumption, which is more likely to be checked by the greatly enhanced price of the article.

In the Tables contained in this Paper, no notice has been taken of the age of persons convicted, no such data being in existence. I may, however, remark, that juvenile offenders are in this country entirely unknown. In the same way, female criminals, who in Great Britain are as one to five males, can scarcely be said to exist.

The remarks which I have introduced into this Paper, are necessarily of a limited character, bearing as they do on but one section of this Island population. It will be highly interesting to compare the state of crimes amongst the various classes inhabiting the different Provinces of Ceylon,—the Tamils, the Kandians, the Moormen, the Malays, the Singhalese, and trace the effects of growing wealth and intelligence upon their morals.

Should I succeed in obtaining the necessary returns from the remaining Districts of the Island, I will hope to follow up the present enquiry by a second and more copious Paper, reviewing the Crime of the entire Island.

---

## SINHALESE RHETORIC.

BY JAMES D' ALWIS, ESQ., ASSISTANT SECRETARY.

In the Essay, which on the 13th August, 1850, I read before this Society on, "The Sinhalese language, its Poetry and Poets;" and which I have since published as an Introduction and Appendix to the *Sidat Sangarāwa*, I made a few general observations on "Sinhalese Rhetoric," and also presented portions of the *Swabāsha-alan̄kāra*,\* a work on Sinhalese Rhetoric. I now return to the subject, and avail myself of the present opportunity of laying before you a brief outline of the properties of style.

There are thirty-five rules laid down in the *Swabāsha-alan̄kāra*, for the attainment of a rhetorically correct style. I shall here present the reader with a brief summary of them.

Where proper terms (other than tropes) are employed, being a natural resemblance to the things signified, the language is such as will contribute much to fix our attention, and is called *swaba*, e.g.

තුඩිත්වක් සුරත් මරා පාතා කොළෙළිසෙත්  
 ගෙලෙන්බැසි වරණර පිපුරා වදන්සුවා සිඤ්ඤ

"The bird that has a red crooked beak, green delicate wings, three lines in the neck, and is capable of articulate sounds, is the Parrot."

The above is an example exhibiting a sentence devoid of rhetorical tropes, and presenting proper *nouns*, particular and determinate in their signification.

The writer proceeds to give examples in such of the other parts of speech as are most susceptible of vivacity and elegance.

---

\* See "*Sidat Sangarāwa*," pp. 31, 82, 88, 184.

The *verb* is the next in order, and we select the following illustration from the *Kāvyaśékharaya* :—

දත්තාකුචපාලාසුරතල්සිකාසි      ලා  
බොලදබස්දිලාකෙලිසිසලභද්‍රලිහා      ලා

“The babe sports about, exhibiting his budding teeth, smiling most lovely, chattering most tender expressions, and daubing (himself) all over his body with dust.”

Here the word කෙලි ‘sports’ is particularly expressive of the habit of children, and contributes much to the vivacity of the expression. If instead of කෙලි the poet had used දිවි “runs about” the expression would have been tame and weak.

In *adjectives* the same author gives a beautiful example, in describing the virtues of King Parīkrama Bāhu :

සමුද්‍රගාමුරුතුණමුදුරුගිරිගරසරතු      ණ  
සිසිරකරසොමිතුණපවතිමොසුකෙරෙහිමමෙතුන්තු      ණ

“An ocean in profound learning—the Mern in firm steadfast qualities—a moon in gentleness—these three virtues did he possess.”

The words ගාමුරු, ගරසර, and සොමි are, happily chosen ; the first conveys the depth of his erudition as vast as ‘the fathomless profound’; the second his firmness and unwavering resolution, as steadfast as the great *Mandara*, mountain ; and the third his amiability of disposition, as gentle as the ‘moon beams.’

Another mode of contributing to the vivacity of style is by the adoption of *rhetorical tropes*. Of these “comparison” is one ; and may be described as presenting a parallel between the case in hand, and some other that is calculated to call forth such emotion.

There are several kinds of comparisons. Where a comparison is instituted, the resemblance in a certain quality being stated, the figure is a *simile*, *e.g.* :

සොමිසදවන්සොවාකිල      ජ  
බලාආගෙවතබ      ජ

“Having seen the splendour of her countenance, like the spotless gentle moon.”

When the resemblance between the comparates is merely implied, the figure is a *metaphor*; as

ඇඟේපුවලමාලක	ක
නිකරදිසිවිදුදමෙව්සිරික	ක

“Her delicate arms were like flashes of lightning.”

The usual order of comparates is sometimes changed with a view to give prominence to the object to which a comparison is instituted. Thus we say, මේ ලමයා වාගේ බල්ලා දුවයි ‘A dog runs about like this child.’ There is greater vivacity in this sentence, than if we expressed it බල්ලා වාගේ මේ ලමයා දුවයි, ‘This child runs about like a dog.’ In the latter the comparison is simply instituted, but in the former stress is laid on the propensity of the child to mischief, which it is intended to correct. So likewise, to use an illustration given in the work before us;

උටමෙව් නි පුබුදුපිසුවෙක.

“A full blown lotus is like thy face (O gentle creature!)”

The change of the usual order in the use of the comparates renders the compliment more expressive. A comparison is sometimes repeated by reversing the order of the comparates in the repetition, as when we say; උා වගේම මුත් හොරයි මුවගේම උාත් හොරයි, “Like him is this fellow a thief, and like this fellow is he a thief.” The repetition conduces much to the energy, or vivacity of expression. We shall present the reader with an example from the work before us:

උටමෙව් නි පිසුම්, පිසුමෙව් නි පිළිඋවත්.

“Thy face is like a lotus, and the lotus is like thy face (Gentle creature).”

A comparison or metaphor limiting the similitude of the subject compared to one particular object, conduces greatly to elevate or degrade the subject, according to the design of the writer or speaker; as when we say නිඋවත් කමලක්කා, මසුසු. ‘Thy face is (like) the *very* lotus.’ Comparisons or metaphors exhibiting the similitude to divers objects are

frequently to be met with in our books ; and they conduce much to elevate the subject. We take an example from the *Kusa Jātaka*.

කාරකොඳු මුවකාර කරඟිර සද්දියය.

“His renown was like that of stars, jasmine, pearls, and mount Kailasa.”

Here the poet has selected *white* objects to convey the purity of that renown which it was his wish to exalt. If he had chosen other objects, as කබර the *red lotus*, the entire beauty of the comparison would have been lost.

There is frequently to be met with in our books a species of metaphor called *pratiwastu*, which is the expression of two sentiments, without stating the resemblance between them. This is a trope very pleasing to the mind, “as men are more gratified at catching the resemblance for themselves, than at having it pointed to them.”\* *Subdsita* abounds in metaphors of this kind, and we shall select the following as an example :—

කැමැද පුතුන් සියයක් ලදුවන්හි	රු
ආක කැක බෙලෙන් පුතු පුතුමය ඉතාය	රු
එක පුත් සදින් දුරුවෙයි ලොවගන අද	රු
නෙකකරු රැසින් එලසට නොම වෙසද	රු

“Better one son wise and good ; there is no benefit even by a hundred of fools. One moon dispels the thick darkness of this world ; it is not dispersed even by hosts of stars.”

Analogical metaphors and comparisons are to be found in the Sighalese, by the comparates being compounded as in the English word, “table-land.” In the language of Dr. Whately

“They are both the more frequent and the more striking. They are the more frequent, because almost every object has such a multitude of relations, of different kinds to many other objects ; and they are the more striking, because (as Dr. A. Smith has well remarked,)

---

\* Dr. Whately on Rhetoric, p. 267.

the more remote and unlike in themselves any two objects are, the more is the mind impressed and gratified by the perception of some point in which they agree,"\*

e.g., ගල්හිත, 'stone-heart,' for 'stone like heart,' යක්ෂ්‍ය, 'devil-face,' for 'devil-like face,' ugly countenance, ගොන් මිනිසා, 'bullock-man,' for 'bullock-like-man,' &c., 'a stupid.' I shall adduce an example from the *Kāvyasākhara*.

නින් ගත දුරමතුරු විතෙදන සුමුදු නිසසු	රු
ඳහ මිනීමහසසුරු වදිමුමුනිදුතු මන්තිලෝඳ	රු

"I bow unto his supreme intelligence, the teacher of the three worlds, an ocean for gems-virtues, a moon for lily-faithful men, and a sun for thick darkness unbelief."

It is to be observed, that compound metaphors, as in the above stanza, where the resemblance between certain objects is implied but not expressed, are very frequent in the Sinhalese. In the example before us, the poet compares the virtues of Buddha to the inestimable gems produced in the ocean; the religious comfort which the followers of that sage derive from his Sermons to the influence which (it is supposed) the moon has over the lily,† his power to convert heretics, to the light of the sun which dispels darkness.

Where direct resemblance between two objects is expressed the Sinhalese use එව් or කැමති, equivalent to the English words 'like,' 'of,' as in 'moon-like brilliancy,' සඳෙව් (i.e., සඳ එව් අව්,) 'light of reason,' යුවත කැමති ආලෝකය. Frequently, too, the comparates are used together, without a sign of comparison: in which case it must be observed, that an object is merely illustrated by the form of another object. Thus we speak of කන් වැල, 'ear creeper,' කපුපත,

\* Dr. Whately on Rhetoric, pp. 265, 266.

† It is to be remarked that if *tumbura* were substituted for *kumudu* the metaphor would prove defective, inasmuch as the former is a sun flower: between it and the moon there would therefore be no relationship.

‘sword leaf.’ This metaphor may be easily understood by an Englishman by removing the order of the above words to suit the idiom of the English; ‘creeper ear,’ or ‘creeping ear,’ ‘leaf sword’ or ‘leafy sword.’

Orientalists give *irony* under the head of metaphor: and it is defined to be a speech, conveying a meaning different to the plain signification of the words. As for instance, if a person whom I bade carry a pot of water to the next room, broke it on his way, and I then exclaimed *සහ සපත් කමක් කරයි*. ‘He has done a very clever job!’ the language would be irony.

Many of the tropes in use amongst Western nations are also to be found in the Siphalese. All the several sorts of *synecdoche*, of which Dr. Campbell treats in his “Philosophy of Rhetoric,” p. 431, (*i.e.*, the genus for the species, the whole for a part, and the matter for the instrument or thing made of it) are of frequent occurrence in our language. Of the genus for the species; when we say *සැසි මදින්නට ගියා* ‘He went to break (extract toddy from) trees;’ by ‘trees’ we mean *palm trees*, a species. When we say *පෙද්ද ඉරුයා* ‘the cloth was torn,’ or *ආරුව බලලෙක් කෑපි* ‘he was bitten by a dog,’ we express the whole for a part. When it is said, *එරන් දහස දෙමස් මුහුට*, ‘by giving him the thousand pieces of gold,’ money is meant, or *masuran*.

In a language like the Siphalese, which abounds with so many delicate expressions to convey various degrees of respect according to circumstances, we can scarcely fail to notice, what is commonly denominated *euphemism*. As an example of this decency in expression, Dr. Campbell has given Martha’s answer to our Saviour, when he directed the removal of the stone over Lazarus’s sepulchre. “Lord, by this time he *smelleth*, for he hath been dead four days.”\* In the Siphalese version, which has closely followed the

---

\* St. John xi. 39.



English expression, the original word 'smelleth' is rendered 'stinketh,' සමාමිනි මහු මරනට පාමිනි හතරදවසක්වෙතබාවිත් දැනට ගදආතයි කීවාය: but it must be observed, that the Sinhalese never use the word ගද 'stink' in a company, but invariably convey the idea by calling it 'smell.' I must not omit, however, to observe here, that even the word ගද, although it has undergone a change in its use by its being applied at present to mean only 'stink,' originally meant 'smell' or 'scent.' As in the following passage in *Amāvatura* :—

දෙවිමිනිස්සු ගදින් මලින්පුදාමහසුමිසමෙහි තාහා සමකෙතෙකුසු  
කැතයි නි.

"Gods and men having offered scents, and flowers, said 'O great man! there is no one here equal to thee.'"

Other instances are not wanting, where to a vivid exhibition of what may appear as delicate, offensive, or indecent, the Sinhalese use a turn of expression different from that which they otherwise use.

Following the order in which Dr. Campbell has treated of tropes, I shall here allude to the *catuchresis*. An example of the use of words in a signification that is very near their ordinary meaning, may be furnished from the following portion of a dialogue to which I listened with pleasure; කොයිද බාන් උමේරාල? Where, I say, is your husband? මොදන්නේ කැ බන්න බලේ නිබුනි 'I don't know, *it was* some where there.' The force and beauty of the Sinhalese expression are entirely lost in the translation. We only use නිබුනා when we refer to an inanimate object. When animate objects are spoken of උන්නා ('was') is the verb employed. In the example before us නිබුනා occurs where උන්නා should have been used. Although this is an impropriety of language (as doubtless in the passage in the Cotta version of the Bible, උදය මගේ දරුවාට කිරිදෙන්නට මම කැතිව්වාම මහු මැරීනිබුනාය, I Kings iii. 21 \*), yet when we wish to express contempt at the

---

\* See Sidath Sangarawa, p. cclvi.

mode in which a man lives, or at the inactivity or laziness with which he passes his days ; such language contributes either to ornament or strength. In the sentence කොයිද ඉර දිනා 'Where is that high one' ; the word දිනා is used for උස් එකා 'tall fellow.' Here the tallness of the person is spoken of either in a contemptuous manner ; or in amazement at his prodigious height.

There is no language in the world in which there is not from time to time a change in the signification of terms, or in which words are not deflected from their original sense. In the Singhalese this is peculiarly the case : and we can easily illustrate the second species of *catuchresis* which Dr. Campbell, (pp. 436, 437,) defines to be.

"When words which, from their etymology appear to be applicable solely to one kind of thing, come afterwards to be applied to another, which is nearly related in its nature or design, but with which, nevertheless, the analysis of the word will not accord."

The word බෝ, for instance, was originally used for "food," and it is now generally understood to mean boiled rice ; දැඩි meant powder, but it is now usually understood as a designation for 'rice powder.'

(To be continued.)

## SCRIPTURE BOTANY OF CEYLON.

BY WILLIAM FERGUSON, ESQ.

---

The following familiar observations on some of the Plants mentioned in the Bible, and which are indigenous to, or are related to genera and species growing or known in Ceylon, form portion of a lecture delivered by me last year to the Young Men's Christian Association in Colombo.

During my inquiries into this subject, I made free use of all the authorities at my command, and therefore, to those who have read one of the various works on the Botany of the Bible, it is not likely that much original matter will be found in these observations, further than the identification of the plants with our Ceylon ones.

## CINNAMON AND CASSIA.

(කුරුඳු *kuruñdu* Sij. *Cinnamomum Zeylanicum*. Nees.)

The word Cinnamon occurs four times in the Bible, first about 1,600 years before the Christian era, in Exodus xxx. ver. 23, where it is enumerated as amongst the ingredients employed in the preparation of the holy anointing oil. "Take thou also unto thee principal spices, of pure myrrh five hundred shekels, and of sweet cinnamon half so much." Again "I have perfumed my bed with myrrh, aloes, and cinnamon. (Prov. vii. 17.) "Spikenard and saffron, callamus and cinnamon, with all trees of frankincense." (Cant. iv. 14.) While in Revelation, among the merchandise of Babylon, we have enumerated "Cinnamon and odours, and ointments and frankincense." (Rev. xviii. 13.)

Besides the real Cinnamon here undoubtedly referred to, (the *Cinnamomum Zeylanicum*), we have four other species indigenous to the Island, one of which, lately discovered by the present Director of the Botanic Gardens, has the perfume of the Lemon Grass so well known in Ceylon. The plant discovered by Mr. Thwaites, bears a name signifying that it has this resemblance.

The references in the Bible to this famous spice have called forth the powers of investigation of several authors, who have thrown considerable light on the subject and on the countries supposed to have produced the Cinnamon of the Bible.

I need not enter into details respecting the Cinnamon plant, for which our Island is renowned above all other places on the face of the earth.

I cannot say much about "the Spicy breezes," perceived by voyagers off the coast and described by Poets, but there is no doubt that after a shower of rain the air in the Cinnamon Gardens is perfumed with the pleasant odour of various flowers around. The odour of the Cinnamon flower is neither powerful nor peculiar.

I had the pleasure, in 1858, of examining in the British Museum specimens of the Cinnamon plant collected by Paul Hermann in this Island about 200 years ago, and which formed the origin of the *Laurus Cinnamomum* and *L. Cassia* of *Linnaeus*, the latter of which did not differ from the former excepting by the narrowness of its leaves, and they seemed to have been made so by the free use of a pair of scissors.

The Cassia of commerce is the produce of several species of Cinnamon, as well as of the real Cinnamon tree, the inferior kinds from Ceylon having been sold as Cassia.

Milton makes several allusions to Cassia—

" ——— and now is come  
Into the blissful field through groves of myrrh  
And flowery odours, cassia, nard and balm."

"Paradise Lost," Book 5.

You all remember the hackneyed allusion to the "spicy gales of Araby the blest" founded on the early idea that the Cinnamon which the Arabs carried to the shores of the Mediterranean was the produce of Arabia.

Another Poet writes :—

"There eternal summer dwells,  
And west winds with musky wing  
About the cedar'd alleys fling  
*Nard* and *Cassia's* balmy smells."

"Sleep in thy peace that bed of spice,  
And makes this place all paradise;  
Let balm and cassia send their scent,  
From out thy maiden monument."

*Herrick, "Dirge of Jephtha."*

Notwithstanding questions raised as to Cinnamon being indigenous to Ceylon, there can be no doubt of the fact, and very little as to Ceylon being the source whence the Arabs derived the Cinnamon which the caravans took down to Egypt and Palestine.

#### OLIVE.

"The dove came into him in the evening, and lo, in her mouth was an olive leaf plucked off; so Noah knew that the waters were abated from off the face of the earth."  
(Gen. viii. 11)

"The trees went forth on a time to anoint a king over them; and they said unto the olive tree, Reign thou over us. But the olive tree said unto them; should I leave my fatness, wherewith by me they honour God and man, and go to be promoted over the trees." (Judges ix. 8, 9.)

This is one of the earliest and oftenest mentioned trees in the Bible, and is by universal consent admitted to be the same as the one now known by that name. It is indigenous to Syria, to the South of Europe, as well as to parts of Africa.

Olive oil and Olives are extensive articles of commerce.

The fragrant olive of China with which the Chinese are said to flavor their tea, was introduced to Ceylon many years ago, and we have two other species of Olive indigenous to the Island, but neither of them must be confounded with the *ඳුරුලු veraḷu* or *illupie* trees, which belong to two distinct Natural Orders, and both considerably separated from the Olive.

I suggest this precaution, from the fact that some of my friends of the American Mission at Jaffna are in the habit of alluding to the *illupie*, which is one of the most valuable trees of the Northern Peninsula, as the Ceylon Olive tree, and because in this quarter Europeans are in the habit of calling the *veraḷu* the Olive. The fruits of this latter tree do indeed bear such an outward resemblance to the Olive, that the genus to which it belongs, has in consequence of this resemblance, been called *Elæocarpus*. The nuts of an allied species are those known to you all as the "Brahmin beads," which, mounted as bracelets, are very commonly worn by ladies.

#### MUSTARD.

"The Kingdom of Heaven is like a grain of mustard seed, which a man took, and sowed in a field; which indeed is the least of all seeds; but when it is grown, it is the greatest among herbs, and becometh a tree, so that the birds of the air come and lodge in the branches thereof." (Matt. xiii. 31, 32.)

Perhaps the plant here translated Mustard, has called forth as much research and learned disquisition as any one named in the Bible. Some writers attempt to prove that because a species of the plant which produces Mustard (*Sinapis*) grows in Palestine to a considerable size, no other plant could have been meant; but the late Dr. Royle produced incontrovertible evidence to prove that the tree here meant is the *Salvadora Persica* of Botanists, a small tree, native of the hot dry parts

of India, and of Persia, Arabia, and Ceylon. In a note to an article on the Flora of Ceylon, contributed by the late Dr. Gardener to the Appendix to Mr. Lee's translation of "Ribeyro's History of Ceylon," it is mentioned, that he considered himself the first to discover this plant in our Island; but it seems, from a notice in Ainslie's "Materia Indica," to have been known as a native of Ceylon many years previously. It is a common plant on the small Islands in the vicinity of Jaffna, and some specimens which I saw several years ago growing on what is called "Small-pox Island," close to Jaffnapatam, bore a general resemblance to the weeping Ash tree. Its seeds taste a good deal like Garden Cresses, and its bark, which is acrid and raises blisters upon the skin, (in this resembling the *Plumbago Zeylanica*,) is used as medicine. There are two species of the genus indigenous to Ceylon.

#### SYCAMORE.

"Over the olive trees and the sycamore trees that were in the low plains was Baal-hanan the Gederite." (I Chron. xxvii. 28.)

The tree here and elsewhere referred to as the Sycamore (*Ficus sycamorus*), is admitted to have been a species of Fig tree, the fruit of which is like the common Fig, and the leaves like those of the Mulberry: hence the name.

We have no less than 22 species of the genus to which the Sycamore belongs, and one, the ගුඳුනක *gay attikka* (*Ficus glomeratus*), bears a great resemblance to the tree here referred to. Some of the species are creeping plants, covering stones and rocks, and the stems of forest trees, somewhat after the fashion of the English Ivy; while others are amongst the giants of the forest. The famous *Banyan* belongs to them, and when at Jaffna, I measured one in the vicinity, which, with its hundreds of depending shoots, covered an acre and 1-12th of ground. This is the tree to which Milton alludes in *Paradise Lost*, as the fig tree whose leaves formed the first

clothing of the primeval pair. The *Bô-gaha* also belongs to the same genus, and I was assured some time ago by Sir J. E. Tennent, that the famous Bô-tree of Anuradhapura, (the description of the introduction of which into Ceylon occupies a chapter of the "Mahāwayssa," (is the oldest historical tree on record. Sir Emerson believes there is evidence to prove that the tree now growing there is the identical one referred to in the "Mahāwayssa." Those who have read the gorgeous language made use of in the "Mahāwayssa,") describing the boat, &c., in which the Bô-branch was carried, cannot but have been struck with the similarity of language and imagery to those used by Shakspeare in reference to the mode in which Cleopatra paid her first visit to Anthony.

Though the wood of the Sycamore tree is soft and coarse, it is believed to have formed the coffins of some of the Mummies found in Egypt.

#### PALM.

"The righteous shall flourish like the Palm tree." (Psalm xcii. 12.)

"And they came to Elim, where were twelve wells of water, and threescore and ten palm trees : and they encamped there by the waters." (Exod. xv. 27.)

The Palm tree here and elsewhere so often mentioned in the Bible, is undoubtedly the Date Palm (*Phœnix dactylifera*), single specimens of which may be seen growing in several parts of Ceylon. It is the රටුරා *raṭa indi* of the Sinhalese ; and a solitary tree which grows at Jaffna, vies in stature with any which I saw growing in Egypt. The two indigenous Date trees of our Island, (from the branches and leaflets of which Tats and Basket work are formed,) will give a very good idea, on a small scale, of the Bible date tree, and the manner in which it produces its fruit. Dates are im-  
ported into England from Barbary and Egypt, and into Ceylon from the Persian Gulf and Arabia.



There are perhaps a hundred varieties of the Date tree cultivated, and those who have eaten of the beautiful, cleanly preserved dates sent to England, cannot but have observed the vast difference between them; and the two kinds we get here. One of these comes in earthen pots, and is of a dark shining appearance, and rather pleasant to eat; but the other comes in messes, and not free of extraneous matter than oriental sugar, which is never known to diminish in weight, however often it is spilled before it gets to the Bazaar.

The ancient Tadmor or Palmyra (built by Solomon and destroyed by the Roman Emperor Aurelian,) was so named from the number of the Date Palms which grew around it. To the natives of portions of Africa and Arabia, it is of greater consequence than the Coconut or Palmyra palms are to the natives of Ceylon; and hence, in former times, during a war with these countries, the greatest curse that could be inflicted upon them was to cut down the stamiferous trees, which were very few in proportion to the fruit-bearing ones, and so prevent the usual crop of dates. In consequence of this barbarous practice, attempts were made to secure a supply of the fertilizing pollen from the male trees, and it is stated that this, secured in earthen vessels, has been known to retain its fertilizing powers for 19 years.

It is no doubt in reference to the barbarous practice of cutting down such trees, that the following law was issued in Deut. xx. 19:—

“Thou shalt not cut down the trees thereof by forcing an axe against them: for thou mayest eat of them, and thou shalt not cut them down, for the tree of the field is man’s life.”

In reference to this passage, the late Mr. Roberts, in his “Illustrations of the Scriptures,” wrote:—

“Can it be a matter of surprise, that the Orientals have a great aversion to cut down any tree which bears fruit, when it is known that they principally live on vegetable production? Ask a man to

cut down a coconut or palmirah tree, and he will say (except when in want, or to oblige a great person) ‘What! destroy that which gives me food? from which I have thatch for my house to defend me from the sun and the rain; which gives me oil for my lamp, a ladle for my kitchen, and charcoal for my fire; from which I have sugar for my board, baskets for my fruits, a bucket for my well, a mat for my bed, a pouch for my betel leaf, leaves for my books, a fence for my yard and a broom for my house? Destroy such a tree! Go to some needy wretch who has pledged his last jewel, and who is anxious to eat his last meal!’

I can imagine how refreshing it must have been for the children of Israel to have found so many Palm trees at Elim and elsewhere in their wanderings, and appreciate the various allusions to this useful tree in a country, many parts of which have a most barren aspect; but for my own part, I confess that the Date trees I saw growing in Egypt did not convey to mind any great idea of elegance or beauty.

Passing from Cairo to Suez, and down the Red Sea, in sight of Arabia and Africa, the scenes of the wanderings of the Israelites, there is scarcely any vegetation to be seen; and the few specimens I picked up in the Desert of Sahara were leafless wiry looking plants.

#### CAMPHIRE.

මරිතන්දි *Maritonḍi* (Tamil and Sig.) (*Lawsonia alba*. Lam.)

Camphire (Kopher or Copher) occurs twice in the Bible,—

“My beloved is unto me as a cluster of camphire in the vineyards of Engedi.” (Song of Sol. iv. 14.)

“Thy plants are an orchard of pomegranates, with pleasant fruits, camphire with spikenard.” (*Ibid.* iv. 13.)

Most writers agree that this refers to the *henna* plant so common in our gardens here. There is no Sinhalese name for the plant, but they have adopted the Tamil one, *maritonḍi*; by some it is called “the Country Mignonette.” It

has been compared with the common Privet, and those who recollect the privet fences so common in England, will see the resemblance. I never saw it growing out of the gardens in this part of the Island, but I am aware it is indigenous to the Northern end, where I have seen it grow in rich profusion for miles along the shores of the salt lake called Kallaveli in the Peninsula of Jaffna, and for my own part I consider it one of the most pleasantly fragrant plants we possess.

It has been proved that the nails of the Mummies, which may have lain for thousands of years, were stained of an iron rust colour from a dye made from the leaves of the *henna*, and the same practice prevails in Ceylon, and other Oriental countries to this day. The plant is found commonly from Morocco, through Palestine, Egypt, Arabia, Persia, and India, on to the Malay Peninsula, and the Islands of the Indian Archipelago, and is used as a dye by the people of all these countries, in one form or another.

It is most likely that in Egypt the practice of dyeing the eye-brows, nails of the hands, and the soles of the feet, with a preparation of *henna*, has been very generally practised for the last two or three thousand years. The Persians and Arabs dye the manes and tails of their horses with it, and here we may see several of the Malays and Moormen whose nails and eye-brows have similarly dyed.

#### FIG.

This is the first tree specially named in the Bible, where our parents are described as sewing fig leaves together, to make themselves aprons. (Gen. iii. 7.) The Fig tree is enumerated (Deut. viii. 8,) as one of the valuable products of Palestine, a land of Wheat and Barley, and Vines, and Fig trees, and Pomegranates. The spies who were sent from the Wilderness of Paran brought back from the brook of Eschol clusters of Grapes, Pomegranates, and Figs. The Fig tree is

referred to as one of the signs of prosperity (1 Kings xviii. 25.) “And Judah and Israel dwelt safely, every man under his vine and under his fig tree.” And its failure is noted as a sign of affliction (Ps. cv. 33) : He smote their fig trees, and broke the trees of their coasts.”

All writers who have studied the subject, are agreed that the Fig tree so often named in the Bible is the common Fig (*Ficus carica*), and which is pretty commonly grown in Ceylon; where most of the fruits, however, fall off before they are matured, from want of knowledge amongst the cultivators, of some facts connected with their cultivation, I believe. The fruit of this, and all the other species of Fig, consists of the hollow succulent receptacle, or general peduncle, enclosing numerous flowers; but from the fact that the Siydhalese are not in the habit of investigating such matters, they assert that the Fig tree has no flowers, and in reference to this, and the confidence placed in the truthfulness of woman by the Siydhalese, Major Forbes gave the following versified translation of some lines uttered in his Court:—

“I’ve seen the Udumbra \* tree in flower,  
 White plumage on the crow,  
 And fishes’ footsteps o’er the deep  
 Have traced thro’ ebb and flow.  
 If man it is who thus asserts,  
 You may his word believe;  
 But if from woman’s lips—distrust,  
 She speaks but to deceive.”

#### CEDAR.

I do not believe we have a single representative in Ceylon of the natural order of Pines to which the Cedar tree belongs. The Casuarinas, common about Colombo, bear a great resemblance to some of the Fir tribe, but that is all.

---

\* The Sanscrit name of the Banyan.

In reference to Solomon as a Botanist, I may just mention, that a genus of small plants has been dedicated to his memory in these words :—

“Salamonia, in honour of Solomon, king of the Jews, the first botanist, flourished about 1,000 years before Christ.” We have two species of this genus in Ceylon, one of which found in the bogs near Colombo, and elsewhere, is a plant from two to three inches in height, often much branched, and having long spikes of rose-colored flowers.

#### ALMOND, PISTACHIA, HAZEL.

“Israel said unto his sons, take of the best fruits in the land in your vessels, and carry down the man a present, a little balm, and a little honey, spices and myrrh, nuts and almonds.” (Gen. xliii. 11.)

It is admitted, that the plant now known as the Almond tree is indetical with the one of the Bible. It is a native of Syria and Palestine, and although I saw some plants of it growing in the Pasha's gardens both at Alexandria and Cairo, it is not likely that it grew in Egypt at the time referred to: hence the reason for its being included in Jacob's present. You will all see the coincidence between this passage and the habit of the Siphalese of bringing presents of fruits to those from whom they expect favors. It is common to all orientals.

The Peach, which has been grown on the mountains of Ceylon for many years past, is a species of the same genus to which the Almond tree belongs, but you must not confound the Almond with what is known here as the country Almond (කොට්ටා, *kottamba*), which belongs to a distinct natural order.

Some trees which were in flower, but not in leaf, at Gibraltar in January 1858, were so profusely covered with rose-colored flowers, that they were conspicuously seen a long way out at sea. The Almond is one of that important

family which, according to the testimony of Geologists, seems to have been created about the same time with man.

The Nuts above named, in connection with the Almond, have, by various commentators, been translated "Pine-nuts," "dates," or "walnuts," but other writers think that the "Pistachio nuts," so much in request in the East, and imported into India from Afghanistan, are meant.

The word rendered Hazel in Gen. xxx. 37, should be translated Almond.

#### POMEGRANATE.

(අඳුරු, *delun* Sīhalese ; *Punica granatum*. Linn.)

"Beneath upon the hem of it (the robe) thou shalt make pomegranates of blue, and of purple, and of scarlet, round about the hem thereof, and bells of gold between them round about, a golden bell and a pomegranate, a golden bell and a pomegranate upon the hem of the robe round about." (Exod. xxxiii. 33, 34.)

There is very frequent allusion to this tree or fruit in the Bible, especially in the gorgeously poetical Song of Solomon, where it is spoken of as follows—"Thy plants are an orchard of pomegranates, with pleasant fruits, camphire and spike-nard." (iv. 13.) "As a piece of a pomegranate are thy temples within thy locks." (vi. 7.) "I went down into the garden of nuts to see the fruits of the valley, and to see whether the vine flourished, and the pomegranates budded." (vi. 11.) (and so in vii. 12.) "I would cause thee to drink spiced wine of the juice of my pomegranate." (viii. 2.) It is common and well-known here, though not indigenous. The Sīhalese name of the plant is *delun*.

In consequence of the very frequent mention of the pomegranate fruit, in books of Eastern travel, I expected to find a very different fruit from the almost tasteless, small, and insipid fruit commonly seen in the bazaars here ; but I am

now convinced, that when properly cultivated, the pomegranate is not only a pleasant, but very refreshing fruit, even to European taste.

When staying with Mr. Henry Rudd for some days, a few years ago, at Kadugannawa, I remember he received from his cousin some cultivated pomegranates, each as large as a child's head, and they were certainly a delicious fruit, equalling, I should think, those which are said to be sent to Bombay from Muscat and Persia. The natives are so fond of them, and have such a high idea of their virtues, that to procure them for a patient suffering from fever or small-pox, they have been known to give from 1s. 6d. to 2s. for a single fruit.

The rind of the fruit is used by European and Native doctors as a powerful astringent, and is supposed to be the principal ingredient used in tanning Morocco leather.

#### TARES.

"The Kingdom of heaven is likened unto a man which sowed good seed in his field, but while men slept, his enemy came and sowed tares among the wheat." (Matt. xiii. 24, 25.)

The tares here\* referred to are supposed to be the Darnel grass of Europe, the *Lolium tremulentum*, a tall grass often found in corn fields resembling the wheat until both are in ear, and remarkable as one of the very few of the large family of grasses possessed of deleterious properties.

One of the greatest pests of the Rice grower of Ceylon is a plant called in Sinhalese කිරින්දි මැද කිරි කිරි *kirindi-mad*, known to us as "Job's Tears" (*Coix lacryma*) and it bears such a close resemblance to the Rice plant, that I believe they are undistinguishable till they bear seed. The seeds of this plant are of a pale grey colour and covered by a flinty shining coat. They are extensively used for bracelets, and I was told by a fellow passenger from St. Helena to England, that Lady Ross, the widow of a former Governor of that

Island, made and sold bracelets of these and other seeds sufficient to build a small church, for which she liberally gave the proceeds.

### WILLOW.

After the Feast of Tabernacles, the children of Israel were required to keep a feast of seven days, and on the first day they were directed to take "boughs of goodly trees, branches of palm trees, and the boughs of thick trees, and willows of the brook; (Lev. xxiii. 40.) and they were to rejoice before the Lord their God seven days. Job, when talking of Behemoth, said "The shady trees cover him with their shadow; the willows of the brook compass him about." (Job xl. 22.)

How very touchingly does the Psalmist describe the feelings of the captive children of Israel, when it was demanded of them to sing in a strange land, one of the songs of Zion, "By the rivers of Babylon, there we sat down, yea, we wept, when we remembered Zion. We hanged our harps upon the willows in the midst thereof." (Psalm cxxxvii. 1, 2.)

"And that which they have laid up, shall they carry away to the brook of the willows." (Is. xv. 7.)

And in another place Isaiah speaks of the Willows as fit emblems for the children of godly parents.

"And they shall spring up as among the grass as willows by the water courses." (Is. xlv. 4.)

There is no species of Willow indigenous to Ceylon, but upwards of thirty years ago, the very species here referred to, the Weeping Willow (*Salix Babylonica*,) was introduced, and now there are growing in front of Mr. Darley's house, plants of the same species, said to have been procured from the famous tree which overhung the tomb of Napoleon in the Island of St. Helena. Several now in Ceylon have doubtless seen this tree, and others of great beauty, when



calling at that Island. We are all familiar with the Willow pattern dishes, the design of which was got from China ; now the Willow there represented, as well as in many of the Chinese paintings of landscapes, is this very species, for it is indigenous to, and very common in, China. In thus glancing at the familiar facts connected with the Willow, how strange are the associations produced in our minds. We first think of the captive Israelites, who because they cannot sing in a strange land, hang their harps upon the Willows ; then we are carried by thought to the tomb in the far off Ocean Isle, where lately lay the remains of one of the greatest wholesale murderers that ever cursed this earth ; and lastly we are borne along to a people (the Chinese) who seem generally to be much in the same state as they were 2000 or 3000 years ago, but who are fast being brought face to face with the civilization of modern Europe,—the civilization of tribes unheard of in ancient Babylon, and still styled “barbarians” by those who arrogate to themselves the title of “Celestials.”

#### HYSSOP.

“He (Solomon) spoke of trees, from the cedar tree that is in Lebanon, even unto the hyssop that springeth out of the wall.” (I Kings iv. 33.)

“Also, when they shall be afraid of that which is high, and fears shall be in the way, and the almond tree shall flourish, and the grasshopper shall be a burden, and *desire* shall fail : because man goeth to his long home, and the mourners go about the streets.” (Eccles. xii. 5.)

A great deal of learned discussion has taken place in reference to the *Esoph* of the old, and the *Hyssopus* of the New Testament, translated in all cases “Hyssop”; and instead of its being the plant well known to most of us as the common Hyssop, it is now generally believed that species of Caper (*Capparis spinosa* or *C. Egyptiaca*) was the plant meant, and indeed is the best suited for the several requirements of the

one so frequently referred to in the Bible. But while there may be a reasonable doubt in our minds on the subject of this plant, perhaps it may be new for some of us to learn that the word "*desire*," in the passage I have quoted from Ecclesiastes, is admitted to indicate a plant, and no other than the plant which chiefly furnishes the Capers of commerce (*C. spinosa*); and which, perhaps, some of us may not be aware of, are the unexpanded flower-buds of this plant. The genus to which the Caper bush belongs, is very widely distributed over the earth, and species answering the requirements of the texts referring to it, were growing in the several countries named in the Bible in connection with it. We have no less than twelve species of the Caper plant indigenous to the Island, some of which, when in flower, festoon the forest trees, and exhibit as rich a floral display as any plant in the Island. Their flowers are in general very conspicuous, and beginning with a fine rose-colored one, which was lately in flower in Colombo, are of various sizes and colors; one, in the jungles of the interior, displaying a profusion of snowy white flowers fully two inches across the petals. There was a very fine one some years ago at Elie House, which has since been cut down. It is a gigantic thorny climber, and known to the Sinhalese as වෙලංගිරියා, *vélangiriya*. It has the flowers so arranged in rows on the stems, that when the uppermost expands and falls off, the next in succession opens in its turn.

#### MALLOW.

This word occurs only once in the Bible, where Job speaks of those, "who cut up mallows by the bushes, and juniper roots for their meat." (Job xxx. 4.)

There has been a great deal of discussion on the subject of the plant here translated Mallow, and it is shewn that the original word may stand for several plants which grow in the lands of the Bible, as well as for the Mallow, some of which indigenous to Ceylon, and of others we have representatives

One of the supposed plants, the "Jews' Mallow," (*Thorchorus olitorius*), is indigenous here : but in passing from Alexandria to Cairo in Egypt lately, and keeping my eyes open, particularly with reference to such subjects, I saw several plots of ground planted with the real Mallow, and cultivated evidently with great care, while I did not detect any of "the Jews' Mallow" so cultivated.

There is no species of the genus to which the Mallow belongs indigenous here,\* but those gorgeous flowering Holy-hocks now so common in our gardens, and the මහඅනොදා, *maha-anódá* of the Sinhalese (*Abutilon Indicum*) so very commonly used by the Natives as a Medicine, are no unfit representatives of the Mallow. Another of the plants which the original word in Job may indicate, is the *Salsola Indica*, and which, according to the testimony of the late Dr. Roxburgh, "saved the lives of many thousands of the poor natives of India during the famine of 1791-2-3 : for while the plant lasted, most of the poorer classes who lived near the sea had little else to eat." In years when the Rice crop fails in the Island of Delft, in the Northern Province, the natives have recourse to the roots of a small grass-like plant called *silinti* in Tamil, and *kalánduru* by the Sinhalese (*Cyperus geminatus*).

#### BRAMBLE.

"Then said all the trees unto the bramble, Come thou and reign over us. And the bramble said unto the trees, If in truth ye anoint me king over you, then come and put your trust in my shadow, and if not, let fire come out of the bramble and devour the cedars of Lebanon." (Judges ix. 14, 45.)

We have no less than seven species of Bramble indigenous

---

\* Since the above was written, I paid more attention to the identification of a common road-side plant in Colombo, which I find to be a true Mallow, and I think *M. tomentosa*, Linn.

to the interior of Ceylon, and most troublesome plants they are to the Surveyor who has to cut boundaries through them; to the intending Planter who explores the forest, or the huntsman who pierces their recesses in pursuit of game. They are known to the Siyhalese, but it appears that the plant translated Bramble, as well as the other plants called Thorns, Thistles, and Briars, are involved in obscurity.

The Bramble, as well as the plant used to make the “crown of thorns” for our Saviour, is supposed to be *Zizyphus spina Christi*, a plant common in the East. The *Zizyphus paliurus*, a plant of Palestine, is supposed to be the Briar so often referred to in Isaiah—“Ye shall know them by their fruits. Do men gather grapes of thorns, or figs of thistles?” (Matt. vii. 16.) A species, closely allied to one of the plants supposed to be referred to here, is common in dry sandy ground near Colombo, it is the බෑඳුනෙරන්චි, *sembu-nerenchi* (*Tribulus terrestris*) of the Siyhalese. It is a small plant, spreads flat on the ground, and its thorny fruits often annoy the barefooted natives.

Of the genus *Zizyphus* we have five species indigenous to Ceylon. The මසන, *masan* or *ilantai* is well known to most of us as producing a fruit, which is freely eaten and sold in the bazaars here.

Many of us have read of a species of fruit eaten by the ancient Lotophagi; which, when once tasted, it was fabled, made those who ate of it lose the love of their country. I saw several of the trees producing these fruits in the gardens at Alexandria, and they bore a very great resemblance to the *masan* tree and fruits.

#### TAMARISK.

“Now Saul abode in Gibeah under a tree in Ramah, having his spear in his hand, and all his servants were standing about him.” (Sam. xxii. 6.)

Most authors are agreed that the word translated "tree" in the above passage, as well as "grove" and "tree" in Gen. xxi. 33, and xxxi. 13, should have been "tamarisk" or "tamarisk-tree."

There is one species of the Tamarisk indigenous to Ceylon, but while the tree of the Bible is spoken of as affording shade, and a refreshing sight to the weary traveller of the desert and other places, our Ceylon tamarisk is remarkable for growing generally in water, "and for a poor leafless appearance." Such, at least, is the peculiarity of those I saw growing in the marshes near Jaffna. It is remarked, that "On the extreme part of the desert of Shur, the scene where Hagar wandered with her outcast child, the stunted bushes of the Tamarisk grow in abundance, and some travellers have remarked, that it was probably under one of these bushes that the desponding mother cast the child of her blighted hope." With reference to shade, I may mention, that the natives of Jaffna have particular objection to rest or to build their huts under the shade of certain trees, while the shade of the Tamarind is chosen by them of all others as being the coolest and healthiest. The Tamarind, however, bears no resemblance, except in name, to the Tamarisk.

There is rather a rare tree in this part of Ceylon, being one of those which the natives call උගුරෙසා *uguressa*, (*Xanthoxylon Rhetsu*), and the seeds of which it is possible the Egyptians used in embalming. Under the shade of this tree, the "hill people of India assemble to examine and determine their matters of public concern," at meetings likely similar to the *gaṇsabhā* of the Siphalese.

There is a fine specimen of this latter tree at the village of Kanatta, near Colombo.

#### ROSE.

"The wilderness and the solitary place shall be glad for them; and the desert shall rejoice, and blossom as the rose." (Isa. xxxv. 1.) "The interesting comparison in the above

verse, and the no less important one in which our Lord is compared to the "Rose of Sharon," are the only two places in which the Rose is named in our English version." (Cant. ii. 1.)

While some writers have attempted to shew that the Rose here meant is the same with the one we all know by that name, others have, I think, shewn with greater reason that some other flower was meant, as "neither this nor any other rose adorns the plain of Sharon."

Some have attempted to prove that a bulbous plant was meant, and have fixed on a species of *Narcissus* (*N. tazetta*), while the late Dr. Royle supposed that the "Rose Bay," (*Nerium oleander*;) so well known in Ceylon, was the flower meant.

This is a common and admired plant of Palestine, and is found in all our gardens here; while on the roads from Jaffna to Chavakachcheri and to Point Pedro, Mr. Dyke has planted rows of one or two beautiful species.

Several varieties of the Rose grow in Ceylon; and in the interior, where whole fences are formed of them, they display a profusion of flowers, which can only be conceived by those who have seen them. Dr. Hooker stated that 20,000 flowers of roses at Ghazepore are required to make a rupee weight of the *attar*, which sells for £10.

The plant known to us as the "Rose of Jericho," is found in the deserts of Syria and Egypt. The annual stems of this plant, when withered and dried, coil up like a ball, but expand on being put in water.

#### LILY.

"I am the rose of Sharon, and the lily of the valleys." (Cant. ii. 1.) "Consider the lilies of the field, how they grow; they toil not, neither do they spin, and yet I say to you, that even Solomon in all his glory was not arrayed like one of those." (Matt. vi. 28, 29)

Many writers have translated the "lily" of the Canticles by Violet, Jessamine, and some other flowers, but the late Dr. Royle believed that the lily of the old and that of the New Testament are two distinct plants, "and thinks the former to be the lotus lily of the Nile." (*Nymphaea lotus*.) This would account for the circumstance, that five times in the Canticles, in which the lily is mentioned, reference is made to "feeding among lilies," as the seeds, roots, and stalks of this flower were common articles of Egyptian diet ; and this author considers, that the frequent reference to this flower in that part of the Scripture, may be owing to the circumstance that the Song of Solomon was written, as has been supposed, on the occasion of his marriage with an Egyptian princess.

Drs. Hooker and Thomson have lately identified the *N. lotus* of the Nile with all the varieties indigenous to or growing in India of the red water-lily, and hence the one growing in several parts of Ceylon is identical with the Lotus of the Nile. It is the අළුතින්, *et-ol-u* of the Siyhalese, and we have white and red varieties of it. It must not, however, be confounded with the sacred bean of India, which grows so profusely in the lake near Colombo, and which threatens to overrun the large sheet of water, as it did the tank between the Racquet Court and the Fort. It is the *Nelumbium speciosum* of Botanists.

It is on this latter plant that, according to ancient Hindoo ideas, the earth was supported ; and it is somewhere recorded that one of the Gods assumed the shape of a boar, and dived down for the space of 3000 years to discover the source of its root, but in vain. There are beautiful allusions to the Lotus in Siyhalese and Tamil poetry.

The Lily of the New Testament, and to which Solomon was compared, is supposed to be the Chalcedonian or Scarlet Martagon Lily, formerly called the "Lily of Byzantium," found from the Adriatic to the Levant, and which, with its scarlet

turban-like flowers, is indeed a most stately and striking object. As this Lily is in flower at the season of the year when the Sermon on the Mount is supposed to have been spoken, is indigenous in the very locality, and is conspicuous, even in the garden for its remarkable showy flowers, there can be little doubt that it is the plant alluded to by our Saviour.

Our magnificent, though common *Gloriosa superba*, and the cultivated Tuberose, are members of the family, and will give you no mean idea of the flower to which Solomon in all his glory was compared. I have seen it once stated, that the flower in question had some beautiful structure which bore out the comparison ; but this is not necessary.

#### LENTILS, BEANS, BARLEY, WHEAT, MILLET.

“And Esau said to Jacob, Feed me, I pray thee, with that same red pottage, for I am faint. Then Jacob gave Esau bread and pottage of lentils.” (Gen. xxv. 30, 34.)

The mess of pottage for which Esau sold his birthright, is supposed to have been made from a small species of Pea, not unlike the green gram of the bazaars, and called පොද, *ulundu* and මුංආ, *munēa* by the Sinhalese. The famous *Revelenta Arabica* is said to be the produce of lentils.

“Barzillai the Gileadite of Rogelim brought beds, and basons and earthen vessels and Wheat and Barley, and flour and parched corn, and Beans and Lentils and parched pulse.” (2 Sam. xvii. 27, 28.)

Beans of several kinds and varieties are amongst the most common vegetables cultivated and sold in our Bazaars here. It would rejoice the heart of a bean-curry-loving Sinhalese, however, to see the fields of a different kind of Bean, as cultivated in England.

When surveying in the forests of Sabaragamuwa, sixteen years ago, my coolies and myself came upon some Sinhalese who lived under projecting stones, under one of which they



had a chatty full of beans and sweet potatoes boiling, and which we were very thankful to get from them, as we had eaten the last of our rice that morning.

I may remark, that though the very common habit of our cooks here to put a copper coin in beans, boiled for table, improves their color, it does not their wholesomeness.

Besides the foregoing and constant allusions to Wheat and Barley in the Bible, Moses described the ancient land of the Israelites as "a land of wheat and barley, and vines and fig trees, and pomegranates; a land of oil olive, and honey." (Deut. viii. 7, 8.) And in reference to Rye, it is said, "The wheat and rye were not smitten, for they were not grown up." (Exod. ix. 32.)

Wheat, Barley and Oats were cultivated in Uva many years ago, and several attempts have been made since to grow them at Nuwara Eliya, but not with any great success. Wheat and Barley are too well known to require a description of them. The wheat the bakers here use, comes from India; rice, *kurakkan*, &c., are members of the same natural order, and like the *Rosaceæ* elsewhere referred to, seem not to have been created before man. The expression, "Cast thy bread upon the waters, for thou shalt find it after many days," (Eccles. xi. 1) is supposed to refer to the Rice grown in the water.

"Take thou also unto thee wheat and barley, and beans, and lentils, and millet and fitches, and put them in one vessel and make thee bread thereof." (Ezek. iv. 9.)

This is the only passage in the Bible where the Millet is mentioned. We have no less than 46 species indigenous to Ceylon of the genus to which the millet belongs, besides the millet referred to, which is freely grown in Ceylon and is known as *mentri*.

The useful "Guinea Grass" belongs to the same genus.

We are aware that the limestone soil of Palestine is no longer a land teeming with corn and fruit, but a sad scene of desolation.

But this is because its people are “scattered.” Let them but return to their goodly land, and use the streams for purposes of Irrigation, and all the ancient fertility of the land will be restored,—the Desert blossoming as the Rose.

#### JONAH'S GOURD.

“The Lord God prepared a gourd, and made it to come up over Jonah, that it might be a shadow over his head, to deliver him from his grief. So Jonah was exceeding glad of the gourd. But God prepared a worm when the morning rose the next day, and it smote the gourd that it withered.” (Jonah iv. 6, 7.)

The Fathers not only pronounced excommunications against those who differed from them on the subject of the plant representing Jonah's Gourd, but came to actual blows amongst themselves on the subject.

It is now admitted to have been the Castor Oil plant so common in Ceylon, and of such rapid growth here and everywhere. At Paumban, and on the Coast of India, the castor oil is used as lamp oil, while in China it is said to be used in cooking.

The Castor Oil, and the Egyptian Cotton plants, were the most frequent shrubs I saw growing between Alexandria and Cairo. The cotton is cultivated in small patches, and at every Railway Station, the castor oil plant, with its bronze-colored, palmated leaves, seemed the most common plant of Egypt.

#### MYRTLE.

“Instead of the thorn shall come up the fir tree, and instead of the brier shall come up the myrtle tree, and it

shall be to the Lord for a name, for an everlasting sign that shall not be cut off." (Is. lv. 13.)

The common Myrtle is the plant here meant, and which is very generally grown in gardens in Ceylon. There is a species of the same genus indigenous to the mountains of the interior.

The Pomegranate elsewhere referred to, as well as the *jambu* or "Rose Apple," belong to the same family of plants as the myrtle of the Bible.

Many of you are familiar with Byron's lines, beginning,—

"Know ye the land where the cypress and myrtle  
Are emblems of deeds that are done in their clime."

#### WILD GOURD, WILD VINE.

"One went out in the field to gather herbs, and found a wild vine, and gathered thereof wild gourds his lapful and came and shred them into the pot of pottage : for they knew them not. So they poured out for the men to eat. And it came to pass as they were eating of the pottage, that they cried out and said, O thou man of God, there is death in the pot. And they could not eat thereof." ( 2 Kings iv. 39, 40.)

You are all familiar with the fact that the above passage refers to the sons of the prophets who were fed by Elisha at Gilgal, when there was a dearth in the land. It is supposed that the herbs which the person who went out wished to collect, were the fruits of the "Egg plant," in fact, the Brinjall so commonly eaten in Ceylon ; but that he mistook for it a plant of the Cucumber family, several of which produce poisonous fruits, and the one which is as likely as any other to have been the poisonous plant—the Colocynth plant—is common in the north of Ceylon, where it spreads on the ground, and displays a profusion of beautifully red-colored fruits. It is the *කකුකුළු*, *Yak-komadu* of the Siydhalese.

Some of us may recollect the fearful results of a mistake committed a couple of years ago by a servant girl at Dingwall, a place within three miles of my native village, in the North of Scotland, where the root of the Aconite or "Monkshood" was used with the gravy of some roasted meat, instead of that of the Horse raddish. Three of the gentlemen who partook of it, died within two hours, while the others narrowly escaped with their lives. The "Monkshood" is identical with the *Bikk* poison of the Himalayas, and is known as one of the most deadly of vegetable poisons.

#### VINE.

There is no doubt that immediately after the waters of the deluge had removed from the face of the earth, this plant was trained and reared by the hand of man ; for, it is said, "Noah began to be an husbandman, and he planted a vineyard." (Gen. ix. 20.) The spies sent from Kadesh-barnea to explore the promised land, brought back, amongst other fruits, a large bunch of grapes ;—and there is constant reference to the Vine and Grapes in the Old and New Testaments. The real Grape Vine here meant is grown in gardens all over Ceylon, but bears fruit successfully at Jaffna only, I believe. There are sixteen species of the same genus indigenous to Ceylon. I have seen the bunches of fruits of one species in the forests, so large, that one of them would be sufficient to form a load for a cooly.

#### BALM OF GILEAD AND SPICES.

"My beloved is gone down into his garden, to the beds of spices." (Cant. vi. 2.) "Is there no balm in Gilead, is there no physician there." (Jer. viii. 22.)

The tree which produced the Balm of Gilead is involved in obscurity. This, and Bdelium, Myrrh, and Incense or Frankincense, are evidently the produce of the same natural order of plants to which our Mangoes belong.

The *kiluvai* and *mukkiluvai* which form such beautiful fences in the Northern Province, produce a very fragrant

gum. The *kiluvai* is evidently the *Protium caudatum*, W. and A. The *Canarium* of the North, and the *mala-kakunas* of this part of the Island, produce resins which are carefully collected, and are said to form the Incense used by the Roman Catholic Priests. On visiting lately the famous Church of St. John, in Malta, the heavy smell of its interior reminded myself and a fellow-traveller very forcibly of the sensation experienced on entering the Buddhist and Hindoo Temples. It seems strange that the two flowers most commonly used in the Buddhist Temples here, viz., the large yellow ones of the *Allamanda Cathartica*, and those of the *Plumeria accuminata*, should both (like the sacred *Bó*) be foreign plants.

The Elm in Hosea (iv. 13.), and the *Teil* tree of Isaiah (vi. 13), should have been translated Terebinth or Turpentine tree. This tree also belongs to the same natural order as our Mangoe, the peculiar flavour of that fruit being referable to the quantity of turpentine in it.

CORIANDER, SAFFRON, CUMMIN, WORMWOOD, ANISE,  
MINT AND RUE.

"The manna was as coriander seed, and the color thereof as the color of Bdelluim." (Numb. xi. 7.) "Woe unto you scribes and Pharisees, hypocrites! for ye pay tithe of mint, and anise, and cummin, and have omitted the weightier matters of the law, judgment, mercy and faith." (Matt. xxiii. 23.)

Coriander, Cummin and Anise all belong to the same tribe of plants, and are known to us all as common bazaar stuffs for Curries. Most of them grow in Ceylon too. They are known in the bazaars as *asamódagan*, *kottamalli*, and *Hin-çnduru*. The plant referred to as Anise should have been translated Dill, which also grows in Ceylon.

"Spikenard and saffron; calamus and cinnamon, with all trees of frankincense; myrrh and aloes, with all the chief spices." (Cant. iv. 4.)

The saffron here referred to, is made from the dried

stamens of the *Crocus sativus*, and must not be confounded with the root so extensively used in curries here, and by the dancing girls at Temples to color their bodies with. This is properly Turmeric, though invariably called Saffron by the natives. The real Crocus is common in the bazaars as a medicine.

“Behold, I will feed them, even this people, with wormwood, and give them water of gall to drink.” (Jer. ix. 15.) One species of the wormwood plant is grown in pots about Colombo, and there is another indigenous to Ceylon. It is a composite plant, and it is most likely that the wormseeds or *kirumisaturu* of the bazaars, and the salt of which is now used so beneficially in Colombo as an anthelmintic, are the produce of the wormwood of the Bible.

“Ye tithe mint and rue and all manner of herbs, and pass over judgment and the love of God.” (Luke xi. 42.)

One species of Mint is indigenous to Ceylon, and the Spearmint and Pepermints have been cultivated here for a long time, and are common in the Island. The Rue plant is also cultivated in Ceylon.

#### CONCLUSION.

The Algom or Almug trees brought by Hiram from Ophir are supposed to have been the Sandal wood tree, and which was growing in Ceylon in Moon's time. When lately in the magnificent Palace of the Pacha of Egypt, at Alexandria, I saw one large room, the flooring of which was composed of Sandal wood.

The Hindú Temple of Somnat, in Guzerat, which was plundered and destroyed by Muhammad of Ghuzni, had gates made of Sandal wood. These were carried off by the conqueror, and afterwards formed the gates of his tomb, whence, after 800 years, they were taken by the British conquerors of Ghuzni, and brought back to India in 1842. Many of you may recollect Lord Ellenborough's memorable despatch

on the subject ; and you will have smiled at Knighton's unaccountable substitution of Sandal for Satin wood, in mentioning the material of which the Péradeniya Bridge was built.

The *Cockle* seems to have been identical with our Prickly Brinjal, the *kaṭu-wambaṭu* of the Siyhalese, and a species of *Solanum*.

The Bay tree or Bay Laurel does not grow here, but the Cinnamon and other trees are representatives of the family to which it belongs.

The Shittah tree (Isa. xli. 19) is supposed to have been a species of *Acacia*, of which genus we have eight species indigenous to Ceylon. In riding from the Hotel at Alexandria to see Cleopatra's Needle and Pompey's Pillar, I found that the tree which formed avenues all along the roads, was the *Súrya-mára* of the Siyhalese, the *A. speciosa* common in Colombo, and one of which is often in flower in front of the Queen's House. It is not unlikely that Anthony and Cleopatra may have reposed under the shade of this species of tree in the vicinity of Alexandria.

The word Ebony occurs only once in the Bible. (Ezek. xxvii. 15.) Several trees producing Ebony of various qualities are found in India, Mauritius and elsewhere, but Ceylon is famed for its Ebony, and there are no less than 21 species of it indigenous to the Island. There is frequent allusion in the ancient Poets to Ebony.

“———— sola India nigrum.

Fert ebum —————.” (*Virg. Georg. 11. 117.*)

“This ground with Bacchus that with Ceres suits :

That other loads the trees with happy fruits ;

A fourth with grass, unbidden, decks the ground ;

Thus Tmolus is with yellow saffron crown'd ;

India *black ebony* and white Iv'ry bears •

And soft Idume weeps her od'rous tears.

*Dryden, Virg. Georg. 1.*

“They sacrifice upon the tops of the mountains, and burn incense upon the hills, under oaks and poplars and elms,

because the shadow thereof is good." (Hos. iv. 23.) The Poplars above referred to, as well as the trees translated Mulberries in several parts of the Bible, doubtless refer to a species of Poplar, several beautiful varieties of which grow from Persia westward to England. The famous Aspen tree (*Populus tremula*), and likely the tree here spoken of, bears a considerable resemblance to our Bó-tree (*Ficus Religiosa*). The petioles of its leaves are so arranged, that if the slightest breath of wind blows, they tremble; and it was formerly supposed that it obtained this trembling motion from the circumstance that the Cross on which our Saviour was crucified was made of its wood. The leaves of the Bó-tree tremble in the same way, in consequence of their long slender petioles and the acuminations on their leaves. This trembling is said, in the Buddhist books, to have been communicated to it from the circumstance that it was the first tree under which Buddha reposed.

"The vine is dried up, and the fig-tree languisheth; the pomegranate tree, the palm tree also, and the apple tree even all the trees of the field, are withered; because joy is withered away from the sons of men." (Joel i. 12.) The "Apple tree" in the above passage, as well as the "Apple" so often referred to by Solomon, in his Song, and in Proverbs, is, doubtless, the Citron, which is grown in several places in Ceylon. The Shaddock, known to us all, was long ago called the Forbidden fruit, or Adam's Apple, and it is sold as such to the present day in the London shops. It is generally called Pumalo, and belongs to the same genus as the Citron.

The Sycamine is a species of Mulberry, known as the *Morus nigra*, and which our *raṭa-embilla*, or Indian Mulberry, common here, a good deal resembles.

The Aloes mixed with Myrrh, and put on the body of our Saviour by Nicodemus, appear to have been the produce of a species of *Aquilaria*, of which our *patta-walla* (*Gyrinops walla*), is a representation.



## THE SUPPOSED IDENTITY BETWEEN NAGARJUNA AND NAGASENA,

BY JAMES D'ALWIS, ESQ., *Asst. Secretary.*

---

Having on a former occasion expressed my views on the passage extracted from the *Rāja Tarangani*, in reference to its *prosodial* precision, I now return to the subject, with the object of reviewing the reasons adduced by the Hon'ble Mr. Turnour in favour of the alleged identity between Nágaséna and Nágarjuna. This position, I perceive, he has laboured to establish in seven different ways :—

1. By the evidence supposed to be furnished by a Bactrian coin found by Lieutenant Burnes ;
2. By supplying a supposed omission of a letter in the text, by which the age of Nágarjuna is brought to correspond exactly with that of Nágaséna in the Buddhist Scriptures ;
3. By identifying Aśoka of Kashmir with the Aśoka of Maghada ;
4. By the strong resemblance between the two names ;
5. By shewing that the title of *Bhumishwara* given to Nágarjuna did not militate against the hypothesis he sought to establish ;
6. By identifying “the six Arhatvas” in the extract made by Professor Wilson with the six Tirtakas mentioned in *Milindappraṣṇa* ;
7. By an adjustment of dates, so as to bring the Chronology of the *Rāja Tarangani* to coincide with the adjusted

Hindú Chronology, and with the *Aṅgikathā* of the *Pitakattya*, and *Māhavaṃsa*

*First.* As to the evidence supposed to be furnished in favour of this hypothesis by the Bactrian coin described in the Bengal Asiatic Society's Journal, vol. II. p. 314, &c., I am willing to abide by the opinion subsequently expressed by Mr. Prinsep, in the following note to Mr. Turnour's observations on the subject.

"Most of our readers are aware that the date assigned in our notice of Lieutenant Burnes' coin, was afterwards in a measure abandoned, on the ground of its being found in association with Sassanian coins of much later period. The reading of the letter P in KANHPKOM was also confirmed by a multitude of specimens. No argument, therefore, can safely be built on the evidence of this coin as to the period of Nāgarjūna's mission, but there remains ample authority without it, in the written history of the Buddhist Church." \*

Abandoning therefore this item of evidence, I shall proceed to a consideration of the second.

*Second.* I have already examined the text with reference to the alteration suggested by Mr. Turnour upon this head; and the correctness of *shardan-varsha-satan*, "one century and a half," as given in the Nāgara version, is attested by the general scope of Kashmirian history, which brings down the fifty-one reigns, including those of Turushka princes and of Abhimanya (in whose reign, as well as afterwards, the Buddhistscherised by the learned Bodhisatwa Nāgarjūna, maintained the ascendancy†), to only B. C. 1182. It would thus seem that the criticism offered is inadmissible, not only upon the supposition of an "inaccuracy of some transcriber of the work," but upon every other conceivable ground, except that of an error, as hinted by Mr. Turnour himself, of "Kalhana Pandit's having misunderstood the Buddhistical writers from whom his authority was derived." Indeed, it would be im-

\* See Bengal Asiatic Journal V. p. 535.

† Asiatic Researches, xv. pp. 113, 114.

possible to adjust this date with precision, even according to Bhuddhistical writers, unless we obtain proofs in support of the next hypothesis of Mr. Turnour, to which we now turn our attention.

*Third.* That Aśoka of Kashmir was identical with the Maghada prince of that name. True it is, that in addition to the resemblance in the names, some little incidents of life, as related of Aśoka in the *Rāja Tarangani*, accord with the same facts detailed in Ceylon and Indian Annals of the Aśoka of Maghada : as for instance, his abolishing the Brahminical rites, and substituting those of Jina or Buddha (*Rāja Tarangani* in "Asiatic Researches," xv. p. 19, and *Mahāwaṃsa*, pp. 23, 26); and his "not having been the direct descendant of his predecessors, who reigned in Kashmir," as attested by the genealogy given in the *Vishṇu Purāṇa*.

Opposed, however, to these marks of resemblance, are the following points of discordance ; *First*, the Aśoka of Kashmir appears, from the whole tenor of the *Rāja Tarangani*, to have been a resident of that country ; whereas the Aśoka of Hindú and Bhuddhistical annals, was a prince of Pátali-puttra (modern Patna), who had previously held the government of Uggeni (Avanti) before his inauguration (*Mahāwaṃsa*, cap. v.) *Second*—The mission of Buddhist priests into Kashmir, the abolition of Nága worship, and the visitation of tempests, are related in *Mahāwaṃsa*, cxiii. as having occurred during the reign of Aśoka of Patna, whilst the same incidents are detailed in the *Rāja Tarangani* as having taken place in the reign of Abhimanya, ("Asiatic Researches," xv. p. 24.) One other reason, and it is a weighty one, for the non-identity of the two Aśokas is, that Kashmir is not included in the number of countries over which the Indian Aśoka reigned ; and according to the Girnar inscription of that monarch, where all the conquered states are named, he was "Lord of the countries of *Avanti, Anupa, Vrija, Anartta, Surashtra, Savara, Kukura, Kirata, Tisha*

and others, all conquered\* by his own might, and maintained in their former prosperity, and all their inhabitants, both high and low, converted into obedient subjects—all these countries, under His Majesty forming one Empire, and furnishing every object of desire and gratification."

Be these differences, however, as they may, the marks of resemblance, and therefore mere presumptive proofs in support of the hypothesis, become perfectly valueless, when we refer to the direct evidence contained in the *Rāja Tarangani*, of the descent of Prince Aśoka, of Kashmir. In the *Rajavali Pataka*, by Prajya Bhatta, brought up to the conquest of the valley by the Emperor Akbār, (printed at Calcutta, edition, of 1835,) occurs the following passage:—

Athānya vāṣha jō rājā ; Gōdharō nāma bhāgya vān [35 v. 7m.]  
 Tādangājāh Suvarṇakhya [v. 60.] s'tatsūnur Janakōnrupah [v. 6.]  
 Sachīnāras tassyā sūnu [v. 71.] r'Aśōka-stat pitruvyajah [v. 62.]  
 Jalawkastatsutō nāma Kashmīrēshu sukapradah [30. v.]

"Thereafter, an illustrious prince named Godhara, born of a different race (reigned 35 years and 7 months), his son Swarna (60 years), his son king Janaka (6 years), his son Sachinara (71 years), his father's brother's son (i.e., cousin) Aśoka (62 years), his son named Jalawka, the benefactor of Kashmira (30 years).

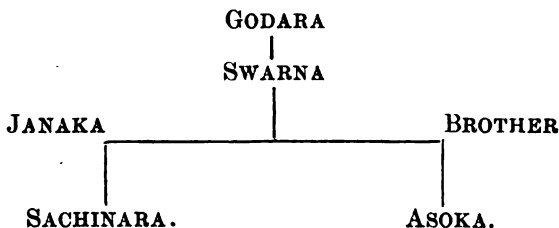
If therefore my translation of this passage be correct, the identity attempted to be instituted between Aśoka "the son of Sachinara's father's brother," (upon the supposition that he was only descended from the paternal great uncle of Khagandra†), and the Indian Aśoka, the grandson of Chandragupta, and the son of Bindusara, falls to the ground. For, according to the genealogy here given, Aśoka was the grandson of

---

\* "The native chronicles of Cashmir," says Sir Erskine Perry in an account of this great Hindu Monarch, &c., in the Bombay Asiatic Journal, xiv. p 173, "ascribe its acquisition to inheritance."

† "Descended from the paternal great uncle of Khagendra."—Pr. Wilson.

Swarna, and not of Chandragupta. Thus :



Again, the *Raja Tarangani* records the accession of Jalawka, a son of Aśoka, upon the demise of that Kashmiran Prince. All those who are conversant with Siṅhalese and Hindú history, know, however, that this was not the case.

Although I differ from Mr. Turnour upon these and other points, to which I have adverted in the course of my observations, I freely confess, that a careful consideration of all the surrounding circumstances leads me to the same conclusion at which that eminent scholar has arrived, viz., that *Nāgarjūna of the Hindús, and Nāgāsēna of the Ceylonese, was one and the same identical person*. I shall therefore proceed to consider

*Fourthly.*—The resemblance between the two names, which is very striking. The *r* in *Nāgarjūna* is clearly a creature of the Sanscrit, and it is dropped in the Pāli and Siṅhalese. The interchange of *j* and *s* is well known. *Rāja* is expressed *rāsā* in Tamil; Jambudwīpa is expressed Zambuduvipa in the Analysis of Tibetan works, by Ksoma de Korosi, and so on. The interchange of vowels, especially *u* into *e* is frequent. Thus the resemblance in the two names furnishing a strong presumption in favour of the identity of this Kashmiran and Buddhistical personage, I proceed to a consideration

*Fifthly.*—That the title of *Bhumeshwara*, may be applied to an Ascetic. *Bhumeshwara* and *Bodhisattva* are two of the appellations given to *Nāgarjūna*. The former is usually applied to statesmen, and the latter to celebrated and eminent

hierarchs of the Buddhist Church. It has been shewn by Mr. Turnour, that the first was also applied to priests; and the second, we know from our own records, to princes; for instance, in our own country *Śrī Sanga Bó*, who had taken upon himself the vows of the *Aṭa-sīl* order is called a Bodhisatwa, in the following extract from the “Attanagaḷuwaṇṣa” :—

Lankābhi sitta vasudhādi patēsu rājā  
Yó bódhi-satta gunawā Siri-Sanga bódhi;  
Tassatīchāru chariyā rachaná mukhēna  
Vakkhami Hattha-vanagalla Vihāra wansan.

“ I celebrate the history of the Temple of Attanagalla; and first dwell on the highly laudable conduct of Śrī Saṅga Bo, who was a *Bhoddhisattva* among the sovereigns of Lanka.”

The meaning assigned to this term in the *Rāja Tarangani*, though not comprehensive, may yet be regarded as approaching to correctness, for the historian himself thus explains its signification in the following stanza :—

Loké bhagawató loka, nathā dārabhya kéchana  
Yé janta vōga takklēshān, bódhisatwāna véhitān.

“ Know ye that if there was any person in the world, from the sanctified Buddha downwards, who had destroyed Klēsha, he is a *Bhoddhisattva*.”

But, whether we regard this distinguished personage as one who denounced the six arahatwas, according to the rendering of the passage by Professor Wilson, or take him as one who had passed six days in the wilderness, as described in the *Nāgara* version, there is, in either case, nought to doubt the alleged identity between *Nāgarjūna* and *Nāgasēna*. It would however seem, that from these appellations alone we cannot ascertain the precise character of *Nāgasēna*. Yet the criticism which I have already offered, and by which the text was altered into “*śhadar vana sanshraye*,” as one who “spent six days in the wilderness,” enabling us to fix upon the sacerdotal or the ascetic character of *Nāgarjūna*, we proceed to a consideration

*Sixthly.*—Of the supposed identity between the “*shadardhatawa*,” or the six Arahats, in the passage as given by Professor Wilson, and the six Tirtakas in the *Milindaprasna*. If the passage were as given by Professor Wilson, there would doubtless be great reason, especially when viewed in connection with other circumstances, to raise a strong presumption in favour of the alleged identity. Not the less strong, however, is the presumptive proof of resemblance, when we take the text to mean (instead of that he denounced the six Tirtakas) that he usually spent six days in the wilderness. For we find, that the passing of six days in the wilderness, was an ascetic rite prescribed by Buddhism.

The *Milindaprasna* records the fact, that Nágaséna attained the sanctified status of an *Arahat*; and we not only learn from the same record, that *niróddhi samapatti* of passing six days in the wilderness was an ascetic rite of the arahat, but the same is also found defined in the *Visudha Marga*.

There is, therefore, much coincidence between the facts detailed in the two historical records : and there is also much concurrence between the statement of Nágaséna's having overcome all the disputants of his age, (see the text), and the facts stated in the following stanzas in the *Rāja Tarangani*, which records,

Tasmin navasaré bowddhá déshé prabalatányayuh,  
Nágárajunéna sudhiyá bodhisatwéna pūlitāh.  
Téwādinah parājittya vādéna nikhilānbudhān,  
Kiriyañ Nila purānóktā machchindannāga madvisāh.

“That at that time (in the reign of Abimane) the Buddhas cherished by the wise Bodhisatwa Nágarjūna attained eminence in this country (Kashmira); and that they who were disputants and enemies of the religion, (i.e., the national religion, or of Vedas) overcame all the wise men in argument, and set aside the practices prescribed in the Nila purana.”

Having reviewed six grounds, upon which Mr. Turnour has based his observations on the identity between Nágarjūna and Nágaséna, I come to the

*Seventh*;—and here I cannot but express my entire concurrence with the remarks so ably set forth by him. In addition to those remarks under this head, I may be permitted here to observe, that the Tibetan Buddhistical annals, as presented to us by Ksoma de Korosi, indisputably establish the identity in question.

Ksoma de Korosi in his analysis of the Tibetan Annals, (see “Asiatic Researches,” vol. xx. p. 400,) alluding to the same prediction contain in the “Mahawāṣṣa,” regarding Nāgaséna, records as facts to be found in the *Sher-chin* collection, that “Nāgarjūna lived 400 years after the death of Shákya, who had foretold of him, that he would be born, after so many years, to explain the higher principles laid down in the *Prajna Paramita*.” In regard to Kanishka, (one of the Turnshka princes mentioned in the *Raja Tarangani*,) it is also stated in the Tibetan annals, that one of the Buddhistical convocations took place in the time of that prince, “*Kanishka*, a king in the north of India, upwards of 400 years from Shákya.” (“Asiatic Researches,” vol. xx. p. 41.) It will be seen also, that I introduced into a paper which I read before this Society, “On the Mythological Legends of the Siyhalese,” an extract from a little pamphlet which records that Nāgaséna was a distinguished hierarch of the Buddhist Church in 490 A.B.

After a careful perusal of these facts, it is indeed impossible to withhold the conclusion to which they inevitably lead, viz., that the personage designated Nāgarjūna in India, and Nāgaséna in Ceylon, was one and the same person; and that the ages of 400 and 500 A.B., (assigned to him in round numbers by the two countries respectively,) are to be regarded as approximating rather than specific dates.

---



## EXPENDITURE ON PUBLIC WORKS IN CEYLON.

---

BY J. CAPPER, ESQ., *Honorary Secretary.*

It was not long since, that my attention was directed to a paper read by Colonel Sykes before the Asiatic Society of Great Britain, on the Expenditure on Public Works in India, and a perusal of it induced me to enter upon the subject of Public Works in Ceylon. It is a topic full of interest, taking us back in our researches, to the earliest records of Siphalese History, when Ceylon, densely peopled, actively industrious, and highly prosperous, produced works of Irrigation, of such magnitude and number as to have raised the wonder of later rulers of the Island, who have hitherto vainly strove to follow even distantly in their steps, by renovating and utilising a few of the gigantic Tanks which lie scattered in ruins over the jungles and swamps of many parts of Ceylon.

As I entered upon this most interesting topic, I found my materials increasing on my hands ; I found the subject extending as I progressed, until I perceived, that instead of a short statistical paper, my researches would lead to an Historical Treatise, to follow up which and do it ample justice, would require more time than I could, for the present, devote to it. This being the case, I felt reluctantly compelled to confine my notes and remarks at this time, to the extent and outlay on Public Works in Ceylon, during a little more than a quarter of a century.

On casting our eyes over the materials for such a paper as this, we cannot fail to be struck with the contrast presented

by the records of the various Governments that have at different periods ruled in Ceylon.

The Siyhalese Monarchs, jealous of foreign intruders within their domains, so far from opening up their Territories by roads, carefully closed up all access to the interior from the sea-bord, leaving nothing but the most difficult and steepest bullock paths. On the other hand, their utmost efforts, the united labour of their people, was directed to the construction of Buddhist structures of colossal magnitude, and Tanks of vast extent. In almost every Chapter of the translated and untranslated portions of that great Historical work, the “Mahawapsā,” we meet with notices more or less brief, but still explicit enough, of the many great public works undertaken by the various Monarchs whose reigns and whose characters are therein chronicled.

Deeply impressed with the importance of and even necessity for a careful and extensive utilising of the water supply of large tracts of country, if those regions were to be made permanently productive, the religious code of their faith enjoined the construction and upkeep of tanks, canals and water-courses, as a sacred duty, and one that should go far to obtain for them hereafter the greatest reward of their existence.

Upon the details connected with Siyhalese Public Works, I cannot now enter ; but must content myself with merely observing, that the existence of the great tanks and water-courses now in ruins, or in partial restoration, were the means, in those remote days, of feeding a much larger population than Ceylon can now boast of, and rendered her perfectly independent of India for her supplies of Grain. Even more than this ; it is on record, that so late as the Portuguese period, rice was exported from Ceylon. What the extent and cost of some of those works must have been, may be gathered from one of our present Governor's Minutes, in which, speaking of Irrigation works in the North-east of the Island, he says of one of them, that it must have occupied a million of men for ten or twelve years in its construction.

The Portuguese do not appear to have devoted any attention to these matters : we can find no trace of any efforts on their part to improve the agriculture of Ceylon. It is true, the greater part of the ancient works of the Siṅhalese monarchs were situated in districts beyond the territories of the Portuguese, but with those which were in their immediate neighbourhood, nothing whatever appears to have been attempted.

The Dutch, far more skilful as Colonists than their predecessors, and ever mindful of work connected with Agriculture and Commerce, devoted much time and labour to canals, and we have good reason for believing to some of the nearest tanks.

The only light thrown upon their labours in the matter of Irrigation works, is contained in the despatches of the Dutch Governors, published at intervals ; but there is no doubt much more valuable information contained in the Dutch records lying in the almirahs of the Colombo Kachcheri. Several reports on the Giant's and other great tanks, by Dutch engineers, are in existence, and have proved of use in the recent engineering operations of our Government.

Although surveys and reports on several important tanks were made in the early part of the British rule, Sir Edward Barnes may be said to have inaugurated Public Works under our Government, by the commencement of the great Kandy Road in 1821. The Péradeniya Bridge, and other useful works followed, but it was not until coffee had drawn so many enterprising cultivators to the Island, that the Department of Public Works assumed any great importance.

*STATEMENT of Outlay on Public Works in Ceylon since 1830.*

Years.	Roads and Canals.	Buildings.	Total.
	£	£	£
1830	3,327	2,403	1,730
1831	3,916	4,570	8,536
1832	4,651	4,549	9,200
1833	11,391	5,188	16,579
1834	17,281	7,991	25,272
1835	17,111	7,038	24,149
1836	28,301	15,014	43,315
1837	43,226	11,552	54,778
1838	22,468	5,488	28,958
1839	7,820	3,393	11,213
1840	16,921	4,957	21,878
1841	26,410	6,936	33,346
1842	20,655	5,963	26,618
1843	20,906	3,443	24,349
1844	38,302	6,180	44,482
1845	56,192	10,123	66,316
1846	63,313	16,748	81,061
1847	70,711	15,672	86,381
1848	40,239	13,793	54,032
1849	42,227	6,822	49,049
1850	49,196	8,205	57,401
1851	57,330	4,021	61,351
1852	56,440	13,176	69,616
1853	55,849	4,973	60,822
1854	52,131	5,654	57,785
1855	63,830	8,773	72,111
1856	77,729	18,300	96,029
1857	102,261	31,037	133,298

*THE following are the miles of roads made during various periods:—*

Previous to	...	1820	...	106 miles.
During	..	1821	...	212½ "
"	..	1824	..	54 "
"	...	1828	...	55 "
"	...	1831-33	...	162 "
"	...	1834-36	..	99½ "
"	...	1837-40	..	11½ "
"	..	1841	...	86½ "
"	...	1842	...	67½ "
"	...	1843	...	156½ "
"	...	1844	...	171 "
"	...	1845	..	177 "
"	...	1846	...	158½ "
"	...	1847-49	...	81½ "

The operation of the Road Ordinance since its introduction in 1848, has, perhaps, done more for the prosperity of Ceylon than any other measure we could name. Thoroughly popular amongst the natives, it has opened up tracts of country hitherto unavailable for wheeled traffic; and has enabled the

population of many districts to find a market for their produce that was before left useless on their hands. It would be perhaps impossible to over-rate the value of this measure.

*STATEMENT of Outlay on Public Works in Ceylon, during 28 years, compared with Ordinary Expenditure.*

Years.	Average Revenue.	Average Expenditure.	Expenditure on Roads.	Expenditure on Buildings.	Total.	Proportion to Gen. Exp.
	<i>Surplus or Deficiency.</i>					
	£	£	£	£	£	Per cent.
1830—1836	59,028 S.	333,222 less 70,000 Military.	12,289	7,778	20,067	7½
1837—1842	16,103 D.	292,839	22,916	6,381	29,297	10
1843—1845	44,459 S.	312,754	38,467	6,582	45,049	14½
1846—1849	46,460 D.	402,839	59,129	15,320	74,449	18½
1850—1857	35,261	337,850	64,534	11,767	76,301	21½
1858		500,000	126,209	43,676	169,885	34

*CONTINGENT Votes of 1858, for Public Works.*

New Buildings	...	...	£14,855	0	0			
Repairs ..	..	..	7,340	0	0			
						22,195	0	0
Repairs of Roads	..	..	39,498	0	0			
New Roads	..	..	9,666	0	0			
Supplementary	..	..	6,412	0	0			
New Bridges	..	..	6,387	0	0			
Repairs of Bridges	..	..	950	0	0			
						62,913	0	0
Military Works	..	..	..	..	..	10,797	0	0
Repairs of Roads	..	..	26,981	0	0			
Under the Road Ordinance	...	...	1,500	0	0			
						28,481	0	0
						£124,386	0	0

*VOTES of Surplus reserved for Works of Public utility, during 1858.*

Cooly Immigration	..	..	£10,000	0	0			
Irrigation	..	..	7,000	0	0			
Works and Buildings	..	..	17,500	0	0			
Roads, Streets and Bridges	..	..	8,500	0	0			
Military Works	..	..	8,000	0	0			
Survey of Military Line	..	..	9,000	0	0			
						60,000	0	0
						£184,386	0	0

The above is irrespective of Outlay on Roads, &c., under the Road Ordinance of 1848.

The paper by Colonel Sykes, to which I before alluded, went to shew, that the East India Company had expended on Public Works in their territories, between the years 1837-1838 and 1845-1846, a sum averaging £253,654; a large sum, it is true, but if compared with the total Civil expenditure of the Company, after all, only about  $1\frac{1}{2}$  per cent. on their gross outlay, omitting that on Military objects. In Ceylon, we have this year reached the extraordinary proportion of 34 per cent., with every probability of its exceeding 40 per cent. over total outlay during the year 1859;—an amount altogether unprecedented in the history of any other Colony or Country.

---



## APPENDIX.





# PROCEEDINGS OF MEETINGS.

---

## GENERAL MEETING,

8th May, 1858.

---

### *Present:*

The Rev. B. BOAKE, in the Chair.

J. DALZIEL, Esq.

J. H. MARSH, Esq.

C. A. LORENZ, Esq.

JAMES ALWIS, Esq.

L. DE SOYZA, Esq.

J. MAITLAND, Esq.

M. COOMARASAMY, Esq.

The Rev. J. D. PALM.

Proceedings of last Meeting were read and confirmed.

The Secretary laid upon the table Part I. of the Society's Journal for the past session, and stated that the second part was making progress in the printer's hands.

The Curator stated that he had met with a qualified person to act as Taxidermist to the Society, for a moderate remuneration; and hoped now that the means existed for properly preserving specimens, Members at outstations and their friends, would lose no opportunity of forwarding such objects as might present themselves.

*Resolved*, that if necessary, £10 might be expended in the purchase of a suitable glass case for the Museum.

The Secretary having requested permission to name an Agent in London for the sale of the Society's Journal,

*Resolved*, that he be allowed to request Messrs. Van Voorst and Co., of Paternoster Row, to act as Agents, and to sell the Journal for Four shillings each Number.

The Vice-President having directed attention to the opinion which prevails very generally, as to the decrease in the population of Ceylon, supposed to arise from the neglect of female infants,

*Resolved*, that the Secretary be requested to draw up and distribute amongst Members and others, a form, calculated to elicit information on this point, and that the results be placed before a future Meeting.

On the motion of the Secretary, seconded by J. Dalziel Esq., A. O. Brodie, Esq., of Matale, was re-elected a Member of this Society.

The following gentlemen were then ballotted for, and declared duly elected as Members, viz :—

J. BAILEY, Esq.	...	...	{ Proposed by L. de Soyza, Esq. Seconded by J. Alwis, Esq.
C. H. STEWART, Esq.	...	...	{ Proposed by J. Alwis, Esq. Seconded by J. Dalziel, Esq.
GEO. WALL, Esq.	...	...	{ Proposed by J. Capper, Esq. Seconded by C. A. Lorenz, Esq.

The following papers were then read :—

"The Laws of the Buddhist Priesthood," by the Rev. D. J. Gogerly.

"A selection of Sinhalese Proverbs," by L. de Soyza, Esq.

"Sinhalese Mythology," by J. Alwis, Esq.

### GENERAL MEETING,

*August 21st, 1858.*

#### *Present :*

The Honorable Sir W. CARPENTER ROWE, Chief Justice, in the Chair.

The Rev. J. D. PALM		M. COOMARASAMY, Esq.
Rev. B. BOAKE		L. NELL, Esq.
C. P. LAYARD, Esq.		W. SKEEN, Esq.
J. H. MARSH, Esq.		J. MAITLAND, Esq.

#### THE SECRETARY.

The Minutes of the previous Meeting were read and confirmed.

The Librarian laid on the table the Books and Periodicals received since that date, viz :—

Balfour's Cyclopædia	...	...	1 Vol.	
Calcutta Review	...	...	8 Nos.	
Engineer's Journal	..	...	6 Nos.	
Capper's Three Presidencies of India	...	...	...	} from J. Capper, Esq.
Mulloch's Siam	...	..	...	
Montrieu on Hindu Law	...	...	...	
Handbook of New Zealand	...	...	...	

The following Gentlemen were then proposed and seconded, as under, and, having been balloted for, were duly elected Members, viz:—

The Hon'ble C. TEMPLE, Esq.	{	Proposed by The Hon'ble the Chief Justice.
	{	Seconded by M. Coomarasamy, Esq.
The Hon'ble H. B. THOMSON, Esq.	{	Proposed by The Hon'ble the Chief Justice.
	{	Seconded by J. Alwis, Esq.
W. DENIS B. HARRISON, Esq.,	{	Proposed by C. P. Layard, Esq.
C. E.                    ..                    ...	{	Seconded by J. Capper, Esq.
J. P. GREEN, Esq.                    ...                    ...	{	Proposed by J. Capper, Esq.
	{	Seconded by J. Maitland, Esq.
W. FERGUSON, Esq.                    ...                    ...	{	Proposed by J. Alwis, Esq.
	{	Seconded by J. Capper, Esq.

The Secretary then placed before the Meeting the following Papers:—

“Descriptions of additional species of Molluscs, Sea Anemones, &c.,” by E. F. Kelaart, Esq., M. D.

“The Scripture Botany of Ceylon,” by Wm. Ferguson, Esq.

“On Singhalese Rhetoric,” by J. de Alwis, Esq.

“A Statistical Enquiry into the state of Crime in Ceylon,” Part I., by John Capper, Esq.

## GENERAL MEETING,

*December 18th, 1858.*

### *Present:*

Sir W. C. ROWE.		Dr. Misso.
Rev. B. BOAKE.		M. COOMARASAMY, Esq.
WM. FERGUSON, Esq.		J. CAPPER, Esq.
C. P. LAYARD, Esq.		

The Secretary laid on the Table the following Books, received since the last Meeting:—

Journal of the Asiatic Society of Bengal, 5 Vols.

Calcutta Review, 1 Vol.

Engineer's Journal, 6 Nos.

Oriental Interpreter, 1 Vol.

It was stated, that a reprint of the first Volume of the Society's Journal was now completed, and would be ready for distribution

in a few days, when Members wishing for copies may obtain them on application to the Secretary.

The Secretary informed the Meeting, that the result of their application to the Government was a grant from the Public funds of £200, to enable them to form a Library and Museum ; and that the Governor has also appropriated to the use of the Society two rooms at the north angle of the new public buildings, lately occupied by a portion of the Civil Engineer's Staff, and adjoining the Auditor-General's Offices. They would, in all probability, obtain possession of their rooms early in January, so that their next General Meeting might be held in them. The Society's thanks were due to Sir Charles MacCarthy, who had exerted himself to secure these advantages to them.

The following Gentlemen were then proposed as Members of the Society, and, being balloted for, were declared duly elected :—

C. H. NEWTON, Esq.	..	{	Proposed by J. De Alwis, Esq. Seconded by J. Capper, Esq.
F. SAUNDERS, Esq.	..	{	Proposed by Sir W. C. Rowe. Seconded by J. Capper, Esq.
The Hon'ble P. I. STERLING.	..	{	Proposed by Sir W. C. Rowe. Seconded by C. P. Layard, Esq.
C. DIAS, Esq., Mudlr.	..	{	Proposed by C. P. Layard, Esq. Seconded by J. De Alwis, Esq.
Rev. E. MOOYAART	..	{	Proposed by J. Capper, Esq. Seconded by Dr. Misso.
Dr. ELLIOTT	..	{	Proposed by C. P. Layard, Esq. Seconded by Wm. Ferguson, Esq.
A. M. FERGUSON, Esq.	..	{	Proposed by C. P. Layard, Esq. Seconded by M. Coomarasamy, Esq.
R. V. DUNLOP, Esq.	..	{	Proposed by C. P. Layard, Esq. Seconded by Wm. Ferguson, Esq.

The reading of the following Papers then took place, viz :—

"The Laws of the Buddhist Priesthood," by the Rev. D. J. Gogerly.

"On the supposed identity between Nargesena and Nargajuna," by James De Alwis, Esq.

"On Public Works in Ceylon," by John Capper, Esq.

## ANNIVERSARY MEETING,

*Monday, September 12th, 1859.*

The Honorable Sir W. Carpenter Rowe, Chief Justice, in the Chair.

The Secretary proceeded to read the following

## REPORT FOR 1858-9.

In placing their Report for the past year before the Society, the Committee desire, in the first place, to express the satisfaction they feel in being able to assemble in rooms placed at their disposal by the liberality and consideration of the Governor.

The want of proper accommodation for their Museum and their Meetings had long been felt; but it was not until the position of the Society was brought to the notice of His Excellency, by the Deputation which waited upon him for the purpose, that this most desirable object was attained. Your Committee have also to report the liberal grant of £200 from the public funds, made by the Government to the funds of the Society, to enable it to extend and improve its Museum and Library.

At the interview which His Excellency the Governor accorded to the Deputation, they received the strongest assurances of countenance and aid which they could have desired. In consequence of this interview, a paper drawn up by the Hon'ble the Chief Justice, was forwarded to the Governor, who, in addition to the favours already mentioned, gave permission to the Committee to transmit, through the medium of the Colonial Secretary to the Government Officials at outstations, a Circular, drawing attention to the many ways in which persons in various parts of the Island might assist the Society in its labours, by information, by papers, or by objects for its Museum.

Copies of the Circular, and the papers which accompanied it, are to be found in the Appendix accompanying this Report; sufficient time has scarcely elapsed since the Circular was distributed, to allow of any results from it, but your Committee cannot too strongly express the hope that, if it be received by those to whom it is addressed in a proper spirit, much good may result. The opportunities presenting themselves to gentlemen at outstations, of collecting data respecting their districts on matters interesting to this Society, must be many; and through such, it is hoped, the co-operation of Native Headmen and others may be secured, in procuring suitable objects for the Museum.

Having so recently obtained possession of the present building, the Curator of your Museum has not been able to accomplish much as yet. A commencement has, however, been made, with the Raw Products of the Island; and it is hoped, that during the present session, this collection may be made complete and interesting. Your Committee believe they are not wrong in assuming, that the natural products of a country form the most interesting portion of its wealth, since from them spring so many branches of industry and commerce. As yet but little has been done towards developing the riches which it is believed may be found hidden amidst the jungles of the Southern and North-Western Provinces, as well as in the forests and plains of the Eastern and Northern Provinces. Evidences are not wanting to shew that Ceylon is rich in Gums, Dye-stuffs, Resins, Tanning substances, and many other articles of considerable commercial value; and, it is thought, that one of the duties of this Society should be, to give a place in its Museum to all articles likely to prove interesting to the man of science, the trader, or the manufacturer.

Your Committee have received through the Honorable the Colonial Secretary, the Prospectus of an Inter-Colonial Exhibition, proposed to be held in the Mauritius in the month of August of the present year. They would gladly have taken an active part as far as practicable in this Exhibition; but felt that the notice was so short, that it would have been impossible to have collected any contributions during the brief period allowed.

They have also received very recently from this Government, a Circular letter, addressed by Her Majesty's Secretary of State to the Governors of Colonies, on the subject of a communication from the Society of Arts and Manufactures, who are anxious to open a correspondence with public bodies in the British settlements, relative to the resources, condition, and development of the trade, &c., of the various British Colonies. Your Committee have referred this correspondence to a Sub-Committee of Arts and Manufactures, consisting of the Honourable the Chief Justice, C. A. Lorenz, Esq., the Revd. J. Thurstan, and the Secretary, in whose hands the matter is left, and who will take upon themselves to communicate with the Society of Arts on the Subject of their Circular.

During the year now terminated, the Society received additions to its Members to the number of 19; whilst the vacancies, caused by departures and deaths, amounted to 3. The total of Members at present borne on the books of the Society is 87, a large number than it could boast of at any previous period.

The Treasurer will place before you a statement of the present condition of the Society's funds, from which you will perceive, that

while the receipts since the revival of the Society in November, 1856, have amounted to £324 4s. 7d., including the Government grant of £200,—the disbursements have reached the sum of £116 16s. 5d.; leaving a balance on the 1st January, 1859, in the hands of the Treasurer, of £207 8s. 10d., subject of course to the expenses of the current year, which have amounted to about £40.

The printing of the Society's Journal for the current year is in an advanced state, and it is hoped that by the end of the year, the Number will be in the hands of Members.

The contents of this issue will be found equally interesting with those of any former Number, and it is confidently hoped, that members both here and at outstations, will not fail to contribute such results of their studies and researches as may be likely to prove acceptable to the Society, and of advantage to the public.

The following is a list of the books, &c., received by the Librarian during the past year:—

*Donations to the Museum.*

Sundry Dye Stuffs and Dye Woods from the North-Western Province, from Mr. Mead.

Specimens of Coir, prepared by Machinery, from Mr. Thomas.

Do. of Kitul Fibre.

Do. of Medicinal Oils, from Mr. C. P. Layard.

Do. of Plantation Coffee .. .. } from various persons.

Do. of Native Coffee ... .. }

Do. of Woods .. .. }

Do. of Minerals .. .. } from New Zealand, by Mr. R. Dawson.

Do. of Native Stone Knife .. .. }

Do. of Vegetable Caterpillar.. .. }

Calcutta Review .. .. 3 Nos.

Journal of Asiatic Society of Bengal .. 3 Nos.

Do. do. of China .. 1 No.

Do. do. of Madras .. 2 Nos.

Do. of Geographical Society of Bombay .. 1 No.

Do. of Asiatic Society of Bombay .. 2 Nos.

Engineer's Journal .. .. 20 Nos.

Moved by the Chief Justice, and seconded by Major Skinner, that the Report now read be adopted.

The Chief Justice, as Chairman, then stated, that it was not his intention to offer any formal written address to the Society on that occasion. Had such an address been required, it would have



come more appropriately from their respected and learned President, Dr. Gogerly, who had contributed the very first paper that had ever been read in that Institution, and whose absence on this occasion he sincerely regretted. Having been called to the Chair, however, in his absence, he felt himself bound to make some brief observations on the able and comprehensive Report which they had just heard,—and especially on that part of it, which commemorated this Meeting of the Society in their own Library and Museum.

On looking into their Minutes, he found that the want of such accommodation had been for years, not only a cause of regret, but of considerable detriment to the collections, books, instruments, and moral interests of the Society. To meet this emergency, Sir Henry Ward had not only put this building at their exclusive disposal, but had accorded to them also a pecuniary grant from the public funds, in aid of the private resources of the Society.

From this day also, as more may reasonably be expected from it, greater zeal, it is to be hoped, will characterise the exertion of its Members.

An ample field for enquiry and discovery still existed in the vegetable, animal, mineral and industrial capabilities of this beautiful island,—and he had great pleasure in calling their attention to some passages from the interesting work now being published by one of their former residents, Sir Emerson Tennent, in which those capabilities were very fully dwelt upon.

The report on the mineral productions of the Colony, to which he alludes, is one of much value; and the minerals collected by the author of that report, Dr. Gygax, are now in their Museum. We all know that iron is very widely disseminated through our hills, but he points out a district near Ratnapura, in which, as he says, it may be found in such quantities, and with such facilities of water-carriage to Colombo, that it may be smelted here with English coal, and rendered as pig iron at £6 per ton.

If he is right in stating, as he does, that anthracite coal may also be raised in considerable quantities in that vicinity, and that the iron itself is of such a quality as not to require the expense of puddling, the cost of manufacture would be so far diminished, as to give reason to hope that these resources might be made practically available for the many public works which are now being carried on around us.

Again, it was within his own, the Chairman's knowledge, that an English gentleman, who had recently visited Ceylon for Commercial purposes, had, through information given him by the Secretary of

this Society, been induced to make researches in our forests and jungles for dyewood, and substances available for tanning, which are there found in great quantities.

He had already so far succeeded in the North-Western Province, that he had actually chartered a ship of 600 tons direct to Liverpool, which was now taking in a cargo of these new products. His attention having been also drawn to a paper by Dr. Gygax, published in the early transactions of this Society, on the coloring matter found in the husk of the coconut, he had made such practical and successful experiments on the subject, as gave reasonable ground for believing that another most useful product might be added to the many already derived from that valuable tree.

He mentioned these things as instances only that there was much here yet to explore.

Sir E. Tennent's very elaborate work, whilst it established beyond all doubt, by reference to specific authorities, that Ceylon was a great mart in very early times for the interchange of traffic between the Eastern and Western worlds, also demonstrated that the natives themselves were by no means an enterprising or commercial people. The Chinese, who are supposed to have frequented Galle in the fifth and sixth centuries, seem to have obtained no exports here, but gems and images of Buddha.

It remained for the Dutch, in after times, to develop the Cinnamon trade; and men of the present generation remember the first planting of Coffee, now the great staple of the Island. English capital and English enterprise might yet add other staples to this, from the thousands of acres of forest that had hardly yet been trodden by human foot.

The report which had been this day read, called their attention to a Circular from the Secretary of State to the Governor, touching a communication from the Society of Arts and Manufactures in London, as to the importance of developing the trade resources of our British Colonies. This shewed the importance attached to such researches at home; and it was in the same spirit that this Society had, some months since, transmitted through the Colonial Secretary's Office at Colombo Circulars to the different outstations—requesting information under the specific heads of natural products, vegetable, animal and mineral, agriculture, irrigation, manures and markets, manufacture and trade, social habits, condition, education, and general statistics of the people. He, the Chairman, was well aware how heavily the duties of official life pressed upon most of our public servants; but still a change of occupation was in itself a relief, and he believed that many a young civilian or soldier, in the solitude of an outstation,

would derive the greatest mental profit to himself, by turning his own attention, and that of the native headmen around him, to such subjects as these.

Sir E. Tennnet, in his book, makes honorable mention of Sir Alexander Johnstone, of Mr. Justice Starke, of Mr. Casie Chetty and others, who had found time amongst their judicial and public avocations, to contribute to the general stock of useful and interesting information touching this Colony. Dr. Gogerly and Mr. Hardy, too, are repeatedly cited by him as the highest authorities on the religion, history, ancient observations, and ancient languages of the natives ;—and above all, he prominently puts forward our excellent Member, Major Skinner, whom we see amongst us here today, as the indefatigable executant of Sir Edward Barnes's enlightened project of not only opening up—by the great work of the Kandy road—the resources, but securing the future peace of the whole of the interior of the Colony.

It could not, then, be too strongly impressed on the public, that every man in his department, either in his own person, or by influencing those about him, might be aiding in this useful work. The statistics of coffee cultivation, the Pearl Fishery, the Ārubōkū dam, the Batticaloa irrigation, the tides and currents so seriously affecting the circumnavigating existence of our Colonial steamer ; the state of the elements and atmosphere, so sensibly deranged at every recurring monsoon ; and even the expeditions of the sportsman, if also a naturalist, all afforded opportunity and matter for observation and valuable communications.

No one could have read the Minutes of the progresses made by our present Governor, through the different Provinces, without being sensible of the great importance attached by him to local researches, and to the development of the material resources of the country. Those Minutes, His Excellency had caused to be presented to our Library, and the Chairman trusted that such an example would not be lost on those who had it in their power, by the acquirement and communication of extensive local information, to establish for themselves one of the best claims for Colonial advancement.

He concluded by moving that the Report be received and adopted.

Carried *nem. con.*

Proposed by the Honourable the Chief Justice.

Seconded by C. A. Lorensz, Esq.

“That the thanks of the Asiatic Society of Ceylon, are eminently due to Sir H. G. Ward, as the first Governor of this Island, who, by assigning a public building exclusively for a Museum and Library, and by a grant of public money in aid of its funds, has given to this Society the position of a Colonial Institution.

“That whilst they tender their thanks in this behalf, the Members of the Society also bear in mind, that no Papers have been published of late years in this place, containing matter more interesting and useful than the Minutes of the progresses of Sir H. G. Ward himself, through the different Provinces of his Government; and, inasmuch as it has pleased him to cause a copy of those Minutes to be deposited in this Library, they, with much pleasure accept them, not only as a record of what can be done by an enterprising Governor for the benefit of the governed, but as an incentive to the Members of Her Majesty's Services, to lend their aid by contributing objects of interest and occasional papers to this institution, in developing the natural resources of the Colony.”

Carried unanimously.

The following Gentlemen were then balloted for, and declared duly elected Members of the Society: the Honorable W. C. Gibson, Esq., A. W. Baylis, Esq., N. Schultze, Esq., H. Mead, Esq.

*Resolved*, that the Secretary be requested to place himself in communication with gentlemen at outstations, likely to interest themselves in the advancement of the Colony, in co-operation with the Society.

*Resolved*, that the following Gentlemen be the Office-bearers for the ensuing year:—

*President:*

Sir W. C. Rowe, Chief Justice.

*Vice-President:*

Rev. B. Boake.

*Secretary:*

J. Capper, Esq.

*Assistant Secretary:*

J. De Alwis, Esq.

*Treasurer:*

C. A. Lorenz, Esq.

*Curator and Librarian:*

J. Maitland, Esq.

*Committee:*

Rev. D. J. Gogerly.  
C. P. Layard, Esq.  
M. Coomarasamy, Esq.  
Rev. B. Boake.  
B. Dawson, Esq.

J. P. Green, Esq.  
J. H. Marsh, Esq.  
L. Nell, Esq.  
Rev. J. D. Palm.

*Committee of Papers:*

Rev. B. Boake.  
 Rev. J. D. Palm.  
 C. A. Lorenz, Esq.  
 L. Nell, Esq.

J. De Alwis, Esq.  
 M. Coomarasamy, Esq.  
 J. Capper, Esq.

---

PAPERS REFERRED TO IN THE REPORT.

---

*Asiatic Society's Rooms,*

*Colombo, January 26th, 1859.*

HIS EXCELLENCY THE GOVERNOR having, with the advice of his Council, assigned to the Asiatic Society of Ceylon, accommodation for its Museum and Library in one of the Public buildings at Colombo, and a pecuniary grant-in-aid of its funds, the Society considers this a fitting occasion for appealing to the Members of the different Services, and to the public at large, for their co-operation in promoting the practical utility of this Institution.

That end, it is apprehended, will be best accomplished, not only by uniting in one Museum at Colombo objects of every description calculated to illustrate the Natural History, the Geology, Mineralogy, Botany, Industrial resources, capabilities and Arts of the Island, but by interesting the Members of the Civil, Medical and Railway Departments, the Officers of Her Majesty's Army and Navy, and the gentlemen engaged in Commercial and Planting pursuits, in contributing such Statistical, Meteorological, Topographical, Historical, and other information as they may be able to collect: and in contributing, from time to time, original Papers to be publicly read at the Meetings of the Society.

The extensive works now in progress for facilitating internal communication, especially the completion of the Telegraph and construction of the Railway, are opening up, daily, new sources of information throughout the Colony, and the organization which already exists in every Government Department including the Mudaliyars, Ratémahatmayás and other Native Headmen, affords the ready means, if well worked, of enabling, as it is hoped, this Institution to become, as the depository of, and as the agent for, diffusing much valuable local information, an active promoter of the public good.

The Society therefore takes this opportunity of informing all who may feel inclined to aid in carrying out the above mentioned objects, that by the liberality of the Government, all Papers and other objects, not too large for the convenience of the tappal, will be conveyed free of expense when addressed to the Secretary of the Society, and enclosed to the Colonial Secretary, Colombo.

Articles of greater bulk, addressed in a similar manner, may be transmitted, alike free of expense, by the "Pearl" Steamer, from any part of the Coast at which she may touch.

JOHN CAPPER,  
Hon. Secy.

---

## HEADS OF ENQUIRY ON SUBJECTS SUITABLE FOR THE ASIATIC SOCIETY.

---

*Agriculture.*—Nature of Soil. Variety of Crops, and number in the year. Period of Land lying fallow. Use of Manures, and description. Irrigation. Agricultural Implements, whether improved or not. New Products raised. Proportion of inhabitants engaged in Agricultural pursuits. Produce if consumed in the District or sent to other markets. Cattle employed in. Description of Cattle reared, and if on the increase: Health and Disease of. Local value of Agricultural Produce and Cattle. If Crops have increased of late. Causes influencing ditto.

*Manufactures.*—If any, and their nature. Articles made; their value on the spot. Whether improvements have taken place in them. If on the increase.

*Trade.*—If any Export Trade exists in the District, in what articles, and to what extent.

*Social Habits and Condition of the People.*—If their condition be improved materially or otherwise, and from what causes. State of Education and Crime. Schools, and of what character; Attendance of Pupils, if on the increase. State of Vernacular education. What books used, and what children attend the Schools. Age at which Marriages take place.

*General Statistics.*—Population if on the increase or otherwise. Causes affecting it. Of what Races composed. General Health, and average Duration of life in the District. Prevailing diseases, number of thatched and tiled houses.

*Natural Products.*—An examination of such Natural Products as exist in the District, distinguishing those well known and in common use from those but little known.

*Antiquities.*—Notices of Ruins of Temples, Public Buildings, Tanks, Water-courses, or ancient Inscriptions in the vicinity, with any traditional accounts relating to them.

*Objects Suitable for the Society's Museum.*

*Birds, Reptiles, Animals, and Fishes*, unless they could be properly preserved for transmission, are not amongst those objects recommended for collection. The Society, however, are willing to supply Arsenical Soap and Camphor to any collectors willing and able to undertake the preservation of objects illustrative of the Natural History of the Island: and, when practicable, glass jars and spirits for the reception of Reptiles or Fishes.

*Geological and Mineralogical specimens* are readily procurable, and always acceptable. Also, *Fossils and Corals* from the Northern Peninsula; *Marine Shells* from the Eastern and North-Western Coasts; and *Land Shells* from all parts of the Island.

*Raw Products* are to be met with everywhere, and to these attention is more particularly directed. Grains, Seeds, Vegetables, Fruits, Gums, Resins, Dye-Stuff and Woods, Oils, Fibres, Barks, Timber, &c., &c. Their abundance, value, locality, &c., &c.

*Manufactures* of every kind, with *Models* of the Machines or Implements employed; and a memorandum of the quantities yearly produced, and their local value.

---

CORRESPONDENCE CONCERNING THE MAURITIUS  
EXHIBITION.

---

*Circular.*

*Colonial Secretary's Office,  
Colombo, 17th June, 1859.*

SIR,—I am directed to transmit to you for distribution, six copies of a Prospectus of an Inter-Colonial Industrial Exhibition, to be held at Mauritius, on the 31st August next, and two following days, under the patronage of the Governor of that Colony, together with copies (6) of the Regulations for the guidance of contributors.

I have, &c.,  
(Signed) JAMES SWAN.

The Honorary Secretary to the Royal Asiatic Society.

---

*Port Louis, 10th April, 1859.*

SIR,—It being the intention of the Royal Society of Arts and Sciences to hold an Industrial Exhibition this year, of which His Excellency the Governor has consented to be Patron, and to invite the Sister Colonies of the Cape, Ceylon and Reunion, to enter into friendly rivalry with Mauritius and each other on this occasion, I am directed

by the Committee of Management to forward to you (herewith enclosed) 200 copies of the Prospectus, with the request, that you will have the goodness to transmit them to the Governments of the above mentioned Colonies, with a view to their being distributed there amongst those persons who are most likely to take an interest in and support our undertaking.

You are requested also to make it generally known to these Governments, that all expenses on account of freight and duties, (live animals excepted,) will be defrayed by the Society of Arts and Sciences, and that the following Regulations must be strictly attended to by the contributors :—

1st.—All articles intended for the Exhibition are to be expedited, so as to arrive here before the 15th of August, 1859.

2nd.—The cases to be addressed as follows:—

To the Committee of Management of the Industrial Exhibition,  
Government House, Mauritius.

3rd.—Each case must contain an accurate list of its contents, together with their uses (if necessary) to be signed by the Contributor. A duplicate of such list to be forwarded by Post, addressed as above.

4th.—In the event of the Contributor desiring to dispose of one or more of the Articles exhibited, the sale price of the same to be written on the List.

5th.—All articles either not sold, or for the disposal of which in Mauritius no specific directions shall have been given, will be returned to the Colony from whence they came, free of expense.

I have, &c.,  
(Signed) W. W. R. KERR,  
*President of the Committee.*

To the Hon'ble the Colonial Secretary.

#### CORRESPONDENCE WITH THE SOCIETY OF ARTS.

*Circular.*

*Downing Street, January 6th, 1859.*

SIR,—I transmit to you enclosed copies of a correspondence which has passed between the Society of Arts, relating to the expediency of discriminating accurate statements of the resources of the Colonies, and of the bearing of such resources upon Trade.

You will perceive that, in the judgment of the Society, that object may best be accomplished by stimulating some competent persons or existing Societies in the several Colonies, to place themselves in



communication with the Society, in order to arrive at a full understanding of the points upon which it may be considered that the mother-country is not now sufficiently informed.

I have earnestly to request, that you will use all the means within your power to promote the views of the Society of Arts, and favour me, if necessary, with any suggestions which you, or other competent persons, may consider better calculated to aid the full development of those views.

I have, &c.,

(Signed) E. B. LYTON.

Governor Sir H. G. WARD, &c., Ceylon.

#### SOCIETY OF ARTS, MANUFACTURES, AND COMMERCE.

*Adelphi, London, July, 1858.*

SIR,—I am directed by the Council of this Society, to bring before your notice the desirableness of obtaining periodically from the more important of our Colonies, accurate statements of their resources, and the bearing such resources may have upon commerce. This Society has always taken a deep interest in the welfare of the Colonies, and if the information sought was obtained, the Council would propose to hold periodical meetings of this Society to discuss it, devoting, say one meeting to each Colony, and publishing accounts of such meetings in the Society's Journal, which is issued weekly, and distributed without charge among the Members, upwards of two thousand in number.

The Council conceive that such information would be reciprocally useful to the Colonies and to this Council, and that much useful knowledge for commercial purposes would be then circulated, which would be otherwise likely to remain dormant.

The Council direct me respectfully to request, if you should approve of what is proposed, that the Colonial Office may forward to the Governors of the Colonies, letters from the Council of this Society, with a recommendation to the Governors to give effect to the wishes of the Council. The Council, in addressing the Governors of Colonies, would request them to ascertain what competent persons in each Colony would be willing to furnish such a report as is suggested, and to put him in direct communication with the Society.

I have, &c.,

(Signed) P. LE NEVE FOSTER,

*Secretary.*

To the Right Hon'ble Sir EDWARD BULWER LYTON, BART, M.P.,  
one of Her Majesty's Principal Secretaries of State, Colonial Office,  
Downing Street.

*Downing Street, 29th July, 1858.*

SIR,—I am directed by Secretary Sir E. B. Lytton, to acknowledge the receipt of your letter, in which you bring under his notice, by direction of the Council of the Society of Arts, the desirableness of obtaining, periodically, from the more important of the Colonies, accurate statements of their resources, and of the bearing which such resources may have upon Commerce, and state the mode in which the Council would propose to obtain such information, and to make it reciprocally useful to the Colonies and to the Society.

I am to request, that you will acquaint the Council of the Society of Arts, that it is Sir E. B. Lytton's wish to aid their project to the fullest extent of his power. But he fears that in most of the Colonies, the Society is at present too developed to allow of individuals, or public bodies being found, who could effectually correspond with the Council on the topics proposed. The Council are also, no doubt, fully aware that the Secretary of State cannot require the dedication of any public funds in the Colonies to this purpose. Subject, however, to these observations, Sir Edward will readily act in the matter as the Council may wish, and will be prepared to transmit to the several Colonial Governors (with the necessary recommendation on his part) such papers as the Council may furnish him for this purpose.

I am, &c.,

(Signed) CARNARVON.

P. LE NEVE FOSTER, Esq.,

*Society of Arts, Adelphi.*

---

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND  
COMMERCE.

*Adelphi, London, W.C., January 1st, 1859.*

MY LORD,—I am directed by the Council of the Society of Arts to acknowledge the receipt of your letter of the 29th July, and to request that your Lordship will thank Sir Edward Bulwer Lytton, on the part of the Society, for the ready assent he has given to the request contained in my former letter, that he would be good enough to transmit to the Governors of the several British Colonies the proposals which have been under consideration, to make use of the Society to diffuse information as to the resources and products of the several British Colonies.

The Council consider, that the best measures for attaining the object they have in view, will be the following :—

1.—That such Colonies as consider that the meetings and proceedings of the Society of Arts would at all serve to give publicity to their

resources, and tend to increase the demand for their productions, should select some competent person, or existing Society in the Colony, to frame a complete statement of the points upon which it is considered that the public of the mother-country are not sufficiently informed.

2.—That the individual or public body thus selected, should at once be put in direct communication with the Society of Arts.

3.—That the person or persons thus chosen should also designate, and obtain the consent of, some well-informed person in this country, either himself to read, at an evening meeting of the Society, the paper prepared in the Colony, or to confer with the Council as to the best method of securing their common objects.

Further proceedings may be later indicated, or may arise from the steps proposed.

Should any Colony consider that a different course of proceeding would better suit the peculiar circumstances of that Colony, the Society of Arts will be quite prepared to receive such suggestions.

I have, &c.,

(Signed) P. LE NEVE FOSTER,

*Secretary.*

TO THE EARL OF CARNARVON, &c., Her Majesty's Under Secretary  
of State for the Colonies.



JOURNAL  
OF THE  
CEYLON BRANCH  
OF THE  
ROYAL ASIATIC SOCIETY,  
1860-61.

---

VOLUME III.

---

No. 12.

---

*EDITED BY THE HONORARY SECRETARY.*

---

"THE DESIGN OF THE SOCIETY IS TO INSTITUTE AND PROMOTE ENQUIRIES INTO THE HISTORY, RELIGION, LITERATURE, ARTS, AND SOCIAL CONDITION OF THE PRESENT AND FORMER INHABITANTS OF THE ISLAND, WITH ITS GEOLOGY, MINEROLOGY, ITS CLIMATE AND METEOROLOGY, ITS BOTANY AND ZOOLOGY."

---

COLOMBO :  
PRINTED AT THE "CEYLON OBSERVER" PRESS.  
1894,



## CONTENTS.

---

	PAGE.
Health and Disease in Ceylon.—By BOYD MOSS, Esq., F.R.C.S.                   ...                   ...	361
Cinnamon.—By JAMES D'ALWIS, Esq.                   ...	372
Notes on the District of Badulla and its Natural Products.—By W. C. ONDATJIE, Esq., Assistant Colonial Surgeon                   ...                   ...	381
The Difference between the Pāli and the Prākrit- Māgadhi of Vararuchi.—By JAMES D'ALWIS, Assistant Secretary                   ...                   ...	429
On Health and Diet, with especial reference to Children and Youths in Ceylon.—By BARCROFT BOAKE, B.A., Vice-President, Asiatic Society, Ceylon                   ...                   ...	434
APPENDIX :—Proceedings of Meetings, &c.                   ...	i
Letters from Sir J. E. Tennent and Dr. Buist to the <i>Athenæum</i> , relative to the Fresh Water Wells of Jaffna                   ...                   ...	xi



# ROYAL ASIATIC SOCIETY, CEYLON BRANCH.

---

## HEALTH AND DISEASE IN CEYLON,

BY BOYD MOSS, ESQ., F.R.C.S.

---

OPINIONS vary much concerning the healthiness of the climate of the Island of Ceylon, many considering that good health is quite incompatible with a prolonged residence here, and it is with a view to enquiry concerning the truth of this supposition, that I have written the few following pages, hoping that they may possibly be of some eventual service to my fellow-countrymen.

There have been, of late, many melancholy deaths among us,—friends taken away whom we have seen in apparently perfect health but a few days before ; and it is a question of great moment and interest whether this fatality is an unavoidable result of a residence in this climate, or whether it can be proved that the increased mortality in this, over more temperate regions, is owing to some fault in our manner of life, or to our own carelessness and neglect of ordinary precautions in avoiding the causes of disease.

Now, I do not hesitate to express an opinion that we may, with ordinary care, pass many years in this Island, without more cause, or with very little more cause, for serious complaints, than in England. I believe that a decrease of bodily vigour, shewing itself in more or less disinclination to exertion, is the only unavoidable result of a residence here, and even this applies only to some parts of the Island, where we find



the atmosphere at the same time hot and loaded with moisture, a combination which is always especially relaxing to the constitution.

Of course sportsmen and others whose occupation leads them to unhealthy districts, must expect to be liable to fever ; but any one sleeping in a tent night after night among the marshes of Essex, or the fens of Lincolnshire, would be equally so. Medical men do not meet with half the diseases in this Island which they are accustomed to see in England, and the most common complaints occurring here, viz., fever and dysentery, are generally so easily cured, when properly treated at their commencement, that I cannot but conclude, that to self-neglect is to be attributed a very large proportion of the deaths among our countrymen in Ceylon.

There is, however, another cause, and I fear a nearly equally great cause of mortality among the adult male portion of the community. I allude to the far greater indulgence in spirituous liquors which obtains here among young men, over what the same class are accustomed to in England. I am sure that any one, on recalling the deaths among male Europeans which have taken place within his memory, will at once admit the truth of this assertion, that drink has had, directly or indirectly, a large share in the mortality. The constitution becomes undermined by the constant indulgence in this habit, and is unable to resist the attack of what might otherwise have been a trifling complaint. I believe that the custom of taking spirits and water regularly twice a day, on board ship on the voyage out from home, is one great cause of this ; and when we consider the solitary life often led by Planters on Coffee Estates, it is hardly to be wondered at that the habit thus acquired should be difficult to break through.

I believe that the mode of diet of Europeans in India generally, is very much against a continuance of good health : and here I feel that I am entering on a subject which must necessarily meet with some opposition ; for there are few

tasks more difficult than that of convincing people that they are wrong in habits, which time and custom have led them to consider as necessary to their existence.

Now, there is no greater error than an idea, which is by no means an uncommon one, that we need a larger supply of animal food in hot climates, than in temperate ones. The reverse is the truth, and there is no better proof of this than in the fact, that we continually see people obliged to have recourse to bitters, before they can induce an appetite to enable them to consume their food, nature evidently resisting this overloading of the system with an unnecessary amount of nourishment. Why is it that we fancy hot curries, chutnee, and stimulants of a similar kind? Not, as I shall presently endeavour to shew, because they are the natural or necessary food of a hot country, but because we find again the stimulus of the chillies and spices necessary to enable us to get through the meal; the stomach becoming thereby incited to attempt to digest more food than is good for it. I really believe, that eating in India is very frequently, or I should say very generally, more a means of passing time than a necessity, and that in proportion as we are enabled to take a larger amount of bodily exercise, we shall find the taste for stimulants of the curry kind diminish. More occupation for the mind, and increased means of amusement, so often wanting in English societies in India, would probably conduce to the same effect.

Many will answer my arguments, by saying that Providence has suited the food of different countries to their inhabitants, and that we, as inhabitants of India, cannot err in following the manner of living, and the diet of the natives.

Now this results from an extremely superficial view of the matter, for, with few exceptions, the food of any nation depends, not on the climate, but on the state of civilization of that nation. Providence has provided suitable food for the lower animals, because they are not gifted with reasoning powers, but merely with instinct, that is, with a faculty

which is incapable of further development ; therefore it was necessary that their instinct should guide them at once to the description of food which is exactly suited to their wants. But on man a mind has been bestowed, which he is expected to make use of in bettering his own condition and that of his fellow-creatures, and thus we see, that as a nation passes from a savage to a civilized state, that not only the arts and sciences, but the general manner of living and feeding, pass through progressive stages of development.

There is one exception perhaps to this law, in the case of the inhabitants of the Polar regions ; but it is an exception that goes to prove the rule, for these countries, from the nature of their climate, may perhaps be said to be incapable of change or improvement, and their inhabitants are so far placed on a level with the lower animals, for the only food which they can obtain is such as is best suited to sustain life and bodily heat ; and we find their taste, consequently, directed to such food as train oil and blubber, without which they would be unable to maintain a healthy existence in the intense cold of the Arctic regions.

Therefore I say, that the exception in the case of these people, helps to prove the general rule, that we must not be guided in our choice of food, in most countries, by the present diet of their inhabitants. The climate of the Polar regions is such that, in all probability, no great progress can ever be made in their state of civilization, and consequently, we see that Providence has given them an inclination to a description of food exactly suited to their wants.

Now, the climate and soil of all other countries, admit of more or less application of the progressive improvements in agricultural science, therefore, though in the uncivilized state of some nations, we may find them existing, in one case on raw or putrid fish, as on some parts of the West Coast of Africa : or, in another case, consuming for food their own species, as among cannibals ; we are not, if our lot happens to be cast in these countries, to consider it best for our health to follow

the example of the natives, but we should follow the suggestions of our own more advanced state of civilization.

We now return to the question of the propriety of the ordinary diet of Europeans in India. We find among the natives a very general use of hot spices, chillies, and such stimulants; but what encouragement does their condition present to us, to imitate them? We see them, for the most part, a weak and indolent race, disinclined to the least extra exertion, and when attacked by disease, much sooner succumbing to it than Europeans. They are, occasionally, perhaps induced to exert themselves under the hope of a reward, but then, though a casual observer might think them capable of enduring a large amount of fatigue, they will generally be found to suffer from it afterwards.

These remarks of course apply principally to the working classes, who form, I imagine, at least nine-tenths of the population of India,—and these, it must be admitted, frequently suffer much from insufficient or bad food; but still their boiled rice, with even a very small quantity of vegetable or fish, contains fully as much nourishment as the potatoes on which the poorer class of Irish, in many cases, almost entirely subsist; and yet an Irishman will, I will venture to say, do three times the amount of work in a day, that can be got out of a cooly, or a Singhalese workman.

To this some, perhaps, will say, but what amount of work would the Irishman do on a Coffee Estate under a hot sun? My reply would be, put them both under similar conditions, that is, the Irishman under a hot sun in India, and set the cooly to work in Ireland in the winter, and I think it would then be found that the Irishman would still do three times as much work as the native of India.

Now, I think that the deduction from this must be, that there is something in the food of the natives here that interferes with the proper digestion and distribution of the actual amount of nourishment which they consume; and I can imagine nothing better calculated to effect this, than

a continual stimulation of the digestive organs by hot pepper, spices, &c., especially when we consider the constitutional change which is always effected by habits of any kind, continued from generation to generation.

With regard to the use of a meat diet by inhabitants of hot countries, we find that there is very often some provision in the laws of their religion, which tends to diminish the supply of animal food. Thus, among the Hindús the cow is sacred, among the Jews the pig is forbidden as food, and the Siphalese are not, or were not, permitted to eat beef. Now we find no such laws among the inhabitants of cold climates, and may, I think, reasonably conclude, that these ordinances, like some other religious ceremonies among Mohammedans, were originally instituted for the health of the people; who, otherwise, from the elementary state of knowledge at the earlier periods of the world, might have committed excesses, which in time would have produced the degeneration and eventual destruction of the race.

The medical science, however, of the present day, explains why one particular diet should be suited to a hot, and another to a cold country. Respiration serves two principal purposes in the human body, it purifies our blood by carrying off from it a substance called carbon, in the form of carbonic acid gas, and at the same time maintains, by a chemical process, the natural heat of the body. Now respiration is quicker in a cold climate or in cold weather than in a hot climate, that is, in a given time we perform a greater number of inspirations and expirations in cold weather than in hot. Now, although in a hot climate there is less work for the lungs in maintaining the temperature of the body, as that of the surrounding atmosphere is so great, still the purification of the blood requires to be carried on; and so, if we still introduce as much carbon into the system in the shape of food, we shall find that as the lungs do not act so frequently, the carbon must accumulate in the blood, or be got rid of by some other means; now this other means of disposing of it is through the liver, which thus has an extra amount

of work thrown on it, and disease is produced unless we adopt one of two courses. We must either increase the action of the lungs, which we may do by active exercise, or we must decrease the amount of food, especially those articles of food which contain most carbon, such as rich and fat meats and spirituous liquors. This fact is well-known by those who supply the unfortunate geese, whose livers make the celebrated *patés de foie gras*. They treat them exactly as many of us treat ourselves in India. They are confined in a hot atmosphere, allowed to take no exercise, and crammed with quantities of rich food. Many, no doubt, are aware of this, and never think of applying it to their own case. I have heard the same person at one moment expressing an opinion that we required here a large amount of animal food to keep up our strength, and, shortly after, dilating on the impropriety of feeding dogs on meat in a hot climate, as it would inevitably kill them.

I will now endeavour to point out by what means, in my opinion, we may best preserve our health in this country. The first thing, without doubt, is a sufficiency of bodily exercise, riding or walking—especially the latter; the best time for this being the early morning: it is within the power of all of us to obtain this. Cold bathing I need hardly mention, as it is a thing few or none of us neglect; but the time at which we should bathe is of some consequence, the best time being in the morning, immediately after the ride or walk,—always before a meal, never soon after: the fact of being warm from active exertions offers no objection to the use of the cold bath, that is, we may without danger go under a spout of cold water in a state of active perspiration from violent exercise. The only reason for avoiding sudden immersion in cold water, is, where we are exhausted from fatigue, and the temperature of the body is fast cooling down. Avoid as much as possible exposure to the sun, never going out in the heat of the day without an umbrella, or a board-brimmed pith hat. It is by no means uncommon to see Europeans in Ceylon, with nothing on their heads

but a Glengarry bonnet, or a small cloth cap, under a burning sun. The wearer, in these cases, can only expect what he deserves, a sun stroke or disease of the liver.

Endeavour as much as possible to avoid a stimulating diet, and heavy late meals, and observe moderation in, not abstinence from, wine, beer, and spirituous liquors. It is almost useless to say anything against late dinners, as the occupation of most people is such as to prevent any alteration in the time at which they take their meals. It is one of the evils inseparable from a state of high civilization, that health is continually sacrificed to temporary advantage; and the more successful that a man is in his business, the less successful he will probably be in the preservation of his health. The quality of our food, however, is nearly always under our control. We are seldom forced to eat what does not agree with us, and, I believe, that if we partook of animal food once only during the day, it would be the better for us; and we should avoid highly-spiced and rich fat dishes; in fact, nature as plainly as possible seconds this advice, for we find the animals of the country peculiarly destitute of fat, while the same animals in cold countries, are, when in a state of health, loaded with it. As far as they themselves are concerned, this is, of course, also a provision of nature dependent on temperature of climate.

Children here are sometimes most improperly fed; I have seen them literally crammed twice or three times a day with meat and curries, to say nothing of little interludes in the shape of biscuits, plantains, &c., the anxious parent all the while wondering why they look so pale, and of course throwing all the blame on the unfortunate climate. It never occurs to her for a moment that the children's digestive organs might possibly be the better for an occasional ten minutes rest; it is not to be wondered at that they have to be sent home after a year or two of this treatment. Children in this climate should most certainly

eat meat but once in the day, and curries I look upon as slow poison to them, unless they are made without most of the usual constituents of a curry.

I have already said that the diseases of most common occurrence in Ceylon, are, if properly attended to at their commencement, generally very easily cured; at the same time complaints which in England would be considered trifling, and might be often neglected without ultimate injury, will not bear the same neglect here, and may soon become serious and permanent. Therefore, we should always apply for medical aid at the first intimation of any departure from our ordinary state of health. Avoid quack medicines and popular remedies, such as "Cholera Drops," the virtues or rather vices of these latter, always depending on the presence of laudanum or opium in some form, which in my opinion is poison in genuine Cholera, and hardly ever necessary, but on the contrary hurtful, in ordinary bowel complaints among Europeans. Any remedy, too, containing opium, is especially objectionable in unprofessional hands, as a medicine for children. A child of nine months old has been killed by four drops of laudanum, and one of four and-a-half years by one-third of a grain of opium; in another case, a drop and-a-half of laudanum proved fatal to an infant, and yet I have seen printed directions in this country for the cure of Dysentery, recommending indefinite doses of "Dover's powder," which contains opium, without any such warning concerning children as that I have just given.

I have noticed a rather prevalent habit among our countrymen in the Island, of taking quinine whenever they fancy themselves to be what they call feverish. Now, although this may do no particular harm, yet it can hardly ever be productive of much good, and may interfere with the proper action of the medicine when it is really required. There is only one case, I think, where quinine is likely to be of service when taken without medical advice, and this is when we are obliged to pass a short time in a



part of the country particularly subject to fevers, and then three or four grains of quinine taken in coffee in the morning will, I believe, give us a very good chance of escaping an attack. This medicine, in skilful hands, is to fever as water is to fire, but when given at improper times, or in insufficient doses, it is generally worse than useless. Change of air is another remedy of great benefit to invalids, but is often much abused and misunderstood. A sea voyage is, unless peculiar circumstances forbid it, generally the best change from this climate; not to the coast of India, or any place still hotter than Ceylon; such a change can seldom be of any use. A trip by sailing vessel to Mauritius, Australia, or the Cape, will generally be the best; and the worst of all changes, unless the person is convalescent, and able to bear much fatigue, I consider to be the Overland Journey home. It is astonishing, after the numerous deaths that have occurred among invalids on this route, that any medical men should still be found to advise their patients to risk their lives by such a proceeding. The journey is most fatiguing to any one, and doubly so to an invalid. I can only conceive one circumstance which can justify the adoption of the Overland Journey by a person seriously ill, and that is when recovery is impossible, and the patient has a wish, at any risk, to die among his or her friends at home. Of course, there are instances where a permanent cure is best effected by the change to the climate of Europe, but the sick person should at any rate possess a sufficiency of strength and convalescence, to enable him to bear the excitement and fatigue of the journey; and if this cannot be brought about by proper medical attention here, I fear it must very frequently happen that the patient will not reach home alive. It is seldom, perhaps, that medical attendance is to be had on a voyage hence to Australia or round the Cape; but I really believe, that in nine cases out of ten, the patient in this case would have a better chance without a Doctor, than on the Overland Journey with a dozen.

A few words in conclusion, on the change of locality, to be obtained by invalids within the Island. To those living in the interior, a visit to Colombo will, in nearly all cases prove, except during the hottest months, a most salutary change. I believe, however, the advantage of Nuwara Eliya as a sanitary station to be rather overrated. I cannot speak from personal observation, but from the description of others, it is apparently excessively damp; and the great range of temperature during the twenty-four hours, from actual frost at night, to tropical heat during the day, leads me to think that there are many places, at a lower elevation, far more generally adapted as a residence for invalids. Of all parts of the Island which I have as yet visited, the Kēlebokka Valley is certainly that to which I should be inclined to send any patient of mine, to whom a change from the low country was necessary. I have seen the thermometer there down to 49° in the early part of the year, a temperature sufficiently low for invalids who have probably been residing in an atmosphere, where the thermometer seldom stood below 70°.

Change for the mind is, however, often nearly as efficacious in producing a return to health, as change of locality; and it is for this reason that I am inclined to think highly of Mauritius, as we may there obtain those social amusements in which our Island is unfortunately so deficient, and which I feel sure form no unimportant element in the preservation of health in this climate, where, as I have before said, almost the sole amusements to which many can look forward after the labours of the day, are the pleasures of the table.

---

## CINNAMON.

BY JAMES D'ALWIS, ESQ.

CONSIDERABLE doubt was, sometime ago, raised by Sir James Emerson Tennent,\* as to the opinion generally entertained by Botanists and Historians,—that “the Cinnamon plant is indigenous to Ceylon.” During the prosecution of his inquiries upon the matter, my attention was invited to the subject; and the result of my investigations is embodied in the following extracts of a letter which I addressed to him, and which, from the peculiar interest which attaches to the question in a historical point of view, I beg to lay before this Society.

If Cinnamon (*Laurus Cinnamomum*, Lin. *Cinnamomum Zeylanicum*, Nees.) were introduced into Ceylon from the neighbouring Continents of Asia and Africa, it is but reasonable to expect that it is still to be found in them. It is not a little curious, however, that no Cinnamon grows in the latter—at least in the vicinity of *Abyssinia*, which is described by travellers as possessing a soil anything but favorable to the growth of Cinnamon.† It is also, I believe, a fact, that during the Dutch Government in Ceylon, Java was not considered to produce either Cinnamon‡ or Cassia, though, doubtless, the latter was found in a wild state:

\* He has embodied the result of his researches in his “History of Ceylon,” vol. i. p. 599, *et seq.*

† Speaking of “the Eastern Coast of Africa to the unknown regions,” Laurent, in his *Ancient Geography*, describes it as “those parched lands over which Arabs roved in former days as in the present.”—p. 348.

‡ In the year 1827, twenty-five boxes of Cinnamon plants, besides a considerable quantity of seeds, were introduced into Batavia, *smuggled from Ceylon*, by an agent in the service of the Dutch Government.—See *Asiatic Journal*, 1827, vol. xvi. pp. 282-3.

and it is generally believed that all the *Cassia* which is exported from Malabar, Java, and even China, is the produce of trees cultivated in those countries within the last half-century. Buchanan, in his "Account of Mysore," (vol. II. p. 512, &c.,) thinks the spice grown in the Continent to be "without doubt the *Laurus Cassia* of Linnæus."\* Even under the Portuguese Government, we learn from Ribeiro (Lee's Translation, p. 141,) attempts were made to improve the quality of the spice grown at Quilon, and in the forests of Porca; but none could be made to compete with that of Ceylon in taste or in fragrance: and you will find that Lee also quotes from Lord Bacon, to shew that half a century earlier than Ribeiro, *Cassia* was used as a substitute for Cinnamon.†

It is not a little remarkable that Colebrooke in his *Amara kôsha*, and Professor H. H. Wilson in his Sanskrit Dictionary, give "woody *Cassia*" as the signification of the Sanskrit terms "*twak-pattra*, *mutkatan*, *brungan*, *twachan*, *chôchan*, *vardngakan*;" which are synonymous terms. I observe too, from your remarks to me, that the result of your reading also tends to the same conclusion—that what the Arabian and the Persian ships produced in ancient times on their return from India, was *Cassia* and not Cinnamon. These are considerations which lead me to believe, that I am correct in representing Ceylon as the only country‡ which

\* In Arian's history of Alexander, although Cinnamon is mentioned as "the produce of a shrub," yet of *Cassia* alone it is stated that it "grew there" (in India)—vol. ii. p. 166.

† "*Nard* and *Cassia* balmy smells."—Milton.

"Let balm and *Cassia* send their scent  
From out thy maiden monument."—

Herrick's "*Dirge of Jephtha*."

‡ "The Java Cinnamon is far superior to the Malabar both in quality and appearance, but is not so handsome in the bale as that of Tellicherry, which is always well packed and with clean joints, whilst that from Java is mixed with many false packed canes and ragged joints, and has a stronger drug flavour. Ceylon is superior in every point of view (colour excepted) to every other description of Cinnamon. It is perfect in its fine aromatic flavour, in the thinness and regularity of its bark, the length and cleanness of the joints in each cane, &c., &c. Java Cinnamon has made the nearest approach to the qualifications of Ceylon Cinnamon,

produces "Sweet Cinnamon," (*peni kurundu*, Siy.), contra-distinguished from "Cassia," (*nika kurundu*, Sip.)\* If this be so, and I may regard it as a well ascertained fact in natural history, that "each tract of country in the world has had its own peculiar creation," the inference that Cinnamon had its origin in Ceylon, is, I conceive, very probable.† It is doubtless from this cause that this spice is so regarded by several writers—that poets have sung of "spicy breezes" in connection with "Ceylon's Isle;" and that the Island itself is termed "*The Cinnamon Isle*."

Its claims to this designation seems to derive great support from a Sanskrit "Catalogue of Botanical names," called the *Saraswatī Nighaṇḍura*, a production of very remote antiquity, in which, among other designations, *Sainḥalan* occurs as a name for Cinnamon.‡ I find from Wilson's "Sanskrit Dictionary," that this name (in a modified form, *Sinhala*) is given to Cinnamon even in India—a fact which removes all doubt as to the genuineness of the application, and the origin of the article.

Now, when we bear in mind that nearly all names

although it is still a very inferior substitute; it is much weaker in flavour and lacks that fine aroma which is the leading feature in the quality of Ceylon Cinnamon. It is besides very inferior in the quilling."—*Report of Messrs. Kilby and Co., Brokers, London, October, 1843.*

\* Baldaeus, in his account of Ceylon, describes *Cassia* as the third sort of Cinnamon, called by the Portuguese *Canel de mar*, or 'wild Cinnamon,' which grows likewise on the Coast of Malabar, but is in no esteem.—*Ancient Travels*, p. 824.

† Speaking of 'centres of creation,' Dr. Gardner says, (see Lee's Translation of Rebeiro's Ceylon) that "till the natural productions of different parts of the surface of the globe came to be investigated with the attention and accuracy which are peculiar to the present age, naturalists rested satisfied with the vague idea that all animals and vegetables had originally radiated from a common centre. And that in the same parallels of latitude the same species would be found. Now we now know not to be the case; and it can be as safely asserted that every large tract of country has had its own peculiar creation of plants and animals, as that two and two make four, the exception now to this general rule being accounted for by disseminating causes in operation."—p. 211.

‡ It also occurs in another botanical work called the *Siddhānta Nighaṇḍura*.

throughout the East are descriptive,\* and that this, which is a possessive noun, bears the signification of "that which belongs to the *Sinhalese*," I am disposed to treat it as a plant indigenous to Ceylon.†

The objections, however, to this are two-fold; 1st, that although so early as in the days of Moses, "Sweet Cinnamon" and "Cassia" were known, (Exod. xxx. 23, 24,) ‡ yet it is not mentioned as a product of Ceylon until after the Muhammadans commenced a traffic in the Indian seas; and 2ndly, that the "Cinnamon regio" of the ancients is described as the *opposite* or *Eastern Coast of Africa*.

For obvious reasons I feel a very great diffidence in advancing an opinion upon this part of the subject, and would therefore merely suggest for your consideration whether the non-mention of Cinnamon until after the Muhammadans had commenced to trade with Ceylon, may not fairly be attributed to causes§ other than the absence

\* Thus, *tippilli* or 'long-pepper,' goes by the name of *Maghada* (Behar) the country where it was originally found. So likewise *Chīnamul* 'caculia cathertica' or *China-root* is so called after the name of the country from whence it was introduced into Ceylon.

† With less evidence in its favour, Dr. Gardener would have us believe, that the coconut palm is indigenous to Ceylon.—Lee's *Ribeiro*, p. 213.

‡ Dr. Royle, having indicated the routes of ancient commerce, concludes this part of his subject with some remarks on the place whence the articles were brought into Egypt and Palestine; and he says: "But Cinnamon and Cassia, nard, calamus, and onycha having been shewn to be peculiar Indian products, known to ancient commerce—there can, I conceive, be no doubt that the *West Coast of India*, and probably also the Island of *Ceylon*, were reached even in the early time." See *Asiatic Journal*, vol. xxxviii. p. 156. As between India and Ceylon, we have already shewn that *Cinnamon* was a peculiar product of the latter country.

§ It may appear strange that so few of the indigenous productions of Ceylon itself are mentioned; that is to say, only precious stones and pearls, without a single allusion to cinnamon and ivory, with which the Island abounds. This apparent inconsistency, however, is removed when we come to consider the very nature of the Sinhalese commerce; and at the same time serves to shew the vast extent and importance of the latter. For, as we have already seen, the trade of Ceylon consisted for the most part in the exchange of foreign goods, brought thither in great quantities from distant regions; in comparison with which the sole produce of the Island itself, would seem very trifling and insignificant. Besides, cinnamon grew only in the interior, and not in the northern parts of the Island, to which alone Sopater's visit was confined; and we

of the article itself in Ceylon, viz., to a deceit practised by the Chinese, who seem to have had before that period a monopoly of trade in the Indian Seas. It is also important to investigate with clearness, whether by "the Eastern Coast of Africa," a part of Asia\* was not meant; or whether the former was at this time a port at which the Chinese vessels touched, and from whence the spice itself was exported to other ports in exchange for European and Egyptian merchandize. The great value too, which was set on this article may seem to have influenced the Chinese, like the Arabs who traded in the Red Sea, to withhold the name of the country from whence they obtained it† and, it may not be improbable, on the other hand, (if the Chinese did not conceal the fact,) that the Greek writers took for granted without much inquiry, that the spice, which they procured from the East Coast of Africa, was a product of those regions.‡

The inaccuracies into which the ancient writers seem to have fallen with regard to the Geography of the Eastern Coast of Africa, and the opposite regions in Asia, may also intimate to us such a want of information in the Greek writers, as to render a mistake on their part possible, and indeed too probable; for, amongst a great many errors

---

must also recollect, that at this early period, gardens appropriated to the cultivation of cinnamon were not yet in existence."—Heeren's *Historical Researches*, ii. p. 425.

\* It would also seem that the ancients "confounded Egypt with Abyssinia."—See Sir William Jones's *Works*, vol. i. p. 274. Also Wilford's *Essay on Egypt*, in Supplement to vol. ii. of the same work, p. 544.

† "The Coast of Ethiopia, from the straits to the eastern headland of Aromata, was much better known after the time of Ptolemy Philadelphus than it is now to us Europeans.\*\*\* There is no doubt that the Arabian possessions must have extended still farther south, perhaps to Madagascar, but they concealed their knowledge from the Greeks."—Laurent's *Ancient Geography*, pp. 349-51.

‡ "The Venetians are thought to have carried on their trade to India with greater advantage than any other nation ever did. They had no direct intercourse with that country, but purchased the commodities of the East, imported by the Mohammedans into Egypt and Syria.\*\*\* Neither the Greeks nor Romans seem to have visited the more Eastern parts of it (India). They procured the productions of those countries only at second hand."—Dr. Adami's *Ancient Geography and History*, pp. 512-3.

enumerated in Wilford's "Essay on Egypt" and other adjacent countries (see Sir W. Jones's Works, ii. p. 493, *et seq.*), we find that a "part of Africa was called *India* by the Greeks, that Theophylact thought that the Nile flowed through Lybia, Ethiopia and *India*" (p. 544); that Strabo considered that the people of Mauritiana were *Indians* or *Hindûs*; that middle India was called *Abyssinia* in the times of Marco Polo; and that Pliny placed Madagascar on the east of Ceylon.

As for the silence of the Ceylonese, it is not at all amazing to me, that a people little accustomed to traffic, and setting no value upon the bark which they did not use either for religious or culinary purposes, omitted to mention the spice in question in any of their books, except their Lexicons or Botanical works, few of which have been spared to us from the ravages of ancient times.\*

And this leads me to notice briefly the second part of your inquiry, as to "the uses to which the ancient Siṃhalese applied this spice." Sacrificial offerings, for which in ancient times Cinnamon was used by other nations, were not known to the Siṃhalese. Indeed, they seem to have regarded it as fit only for medicine. Thus, we perceive the plant spoken of, not only in Indian medical books of high antiquity, such as the *Shusruta*, but also in Sanskrit and Pāli medical writers of Ceylon. The *Sārathasaṅgraha* of Buddha Dāsa (A.D. 350,) and the *Manjûsa* (A.D. 1261,)<sup>†</sup> both mention Cinnamon as an ingredient used as medicine in cases of "snake poison," "elephantiasis," "rheumatism," &c. Except in modern times, I am not aware that this spice was applied by the Siṃhalese to any other use,<sup>‡</sup> and I am

\* "Although in the few native works at our present disposal there is no particular mention made of spices, yet we cannot possibly doubt of their consumption in the country itself. This silence, however, is merely the effect of accidental causes; for neither Manu or the Ramayana had any special occasion of alluding to the subject."—Heeren's *Historical Researches*, ii. p. 276.

† Also in the Siṃhalese *Yogarathakara*, A.D. 1472.

‡ I must not, however, omit to state that frequent mention is made in the *Mahāvaiṣya* of "scented oils," "spices," and "aromatic oils," (see



unable to ascertain any mention of it in the Sinhalese books except our Dictionaries and the Poets.\* (A.D. 1410—1815.)

You will have doubtless read in modern Sinhalese history, that upon the capture of the late Kandyan King, the lamp in his palace was found to contain Cinnamon oil ; but this was probably a luxury, the use of which was borrowed from the Dutch.†

Before concluding these observations, I must not omit to remark that in defining "Cinnamon tree," Prof. Monier Williams in his Dictionary gives the following Sanskrit sentence, which whether quoted from any book of authority, or not, supports the belief generally entertained, that the plant is indigenous to Ceylon—*Purvokta tikta, valkala visish-tah, Sinhala-dvīpa rôhi kshudra vrikshah*. "The aforementioned (is) a small tree (plant) having pungent bark, and grown in the island of *Sinhala*."

In the following list I have given the significations of the several

#### SANSKRIT NAMES FOR CINNAMON AND CASSIA.

1. *Tvatch*, 'skin,' 'bark,' 'rind,' 'peel.'
2. *Varānga*, 'elegant' or 'superior body.'
3. *Brunga*, 'a golden vase.'
4. *Chócha*, 'bark,' 'rind,' 'skin.'‡

---

pp. 124, 182,)—probably referring amongst others to *Cinnamon*, the great fragrance of whose bark was certainly known to the natives, from at least the names given to it (*vide* the list of names at the end.) I have also carefully examined the text of the *Mahāvansa*, but have found the words too large to enable me to express a decided opinion on the subject.

\* එකලවැදිලියාදුල, ඇතිරිඇතිරමගකො      උ  
 මදකලවැදවගල, සුවදමලරොන්පරන්සුලක      උ *Kavyiasékharaya*.

† But, Baldaeus says, that in the beginning of the siege of Colombo by the Dutch, their "General received a letter, writ with his Majesty's own hand," and that "it was curiously perfumed with all sorts of spices."—*Ancient Travels*, p. 720.

‡ These four and the 6th and the 18th, are given in the *Amarakusha* ; and it is remarkable that they are all rendered 'woody Cassia' by Mr. Colebrooke.

5. *Shukla*, 'white,' 'clayed-sugar.'
6. *Utkata*, 'superior,' 'high.'
7. *Sainhala*, (given by Pr. H. H. Wilson as *Sinhala*)  
'Ceylon' 'Sinhalese.'§
8. *Katuparni*, 'pungent leaf.'
9. *Mukhasavrabha*, 'mouth-fragrant.'
10. *Varapriya*, 'highly pleasing,' 'delightful.'||
11. *Sūtkata*, same as *Utkata* with the addition of the  
prefix *Su* 'very,' 'much.'
12. *Lavana-parṇa*, 'beautiful leaf.'¶
13. *Lamanga*, supposed to be an original Sinhalese word  
meaning 'tender body.'\*\*
14. *Phūlaguṇa*, 'frightful,' 'a name of a tree.'
15. *Sīra-rasa*, 'highly flavored.'
16. *Mukha-sōdana*, 'pungent,' 'sharp.'
17. *Patra-gandha*, 'perfumed leaf.'††
18. *Tvak-patra*, 'bark leaf.'
19. *Gudatvak*, 'sugar-bark.'‡‡
20. *Dāru-gandha*, 'scented wood,' 'Cinnamon.'
21. *Tikta-valkala*, 'pungent bark,' 'Cinnamon.'
22. *Sugandha-tvak*, 'scented-bark.' 'Cinnamon.'
23. *Gandha-valkala*, 'scented-bark,' 'Cinnamon.'§§

---

§ Pr. H. H. Wilson gives this in his "Sanskrit Dictionary" in addition to those given in the *Amarakoṣa*—all which he translates "*woody cassia*."

|| The first ten names are given in the *Sarasvatī Nighaṇḍu* for "cinnamon."

¶ The first five, and the 7th, 9th, 11th and 12th, are found in the *Siddhawsadha Nighaṇḍu* as the names for "cinnamon."

\*\* This name is the same in the *Pāli* for "cinnamon."

†† The two first and the 5th, 13th, 14th, 15th, 16th, and 17th, occur in the *Vasadeva Nighaṇḍu* as the names for "cinnamon."

‡‡ Pr. Williams in his English and Sanskrit Dictionary gives this and the 3rd, 6th, 15th, 18th, and 19th as the epithets for "*cassia*."

§§ The last four are given by the last named writer as synonyms for "*cinnamon*."

## SIṄHALESE NAMES.

1. *Kurundu*, the origin of this word does not appear. Probably it is a proper name, and not an epithet.
2. *Lamanga*, from *lama* 'tender,' and *anga* 'body,' a word for 'Cinnamon' or 'Cassia.'\*

---

\* ලමකකුරුද, දෙකකම චේකුරුදුරුක—*Lamavaliya*.

## NOTES ON THE DISTRICT OF BADULLA AND ITS NATURAL PRODUCTS,

BY W. C. ONDATJIE, ESQ., *Assistant Colonial Surgeon.*

---

THE district of Badulla comprehends a no inconsiderable portion of the Central Province; it is in fact of sufficient extent to form a separate Province; and was so regarded when the country was under native Rule; the Government of the District being confided to an officer who bore the title of "Prince of Uva."

The District is bounded towards Ratnapura by Gurumada ; towards Hambantōṭa by Bulatgamarālage Kandura; on the Nuwara Eliya side by the Hakgala range of hills; on the side of the Lower Badulla-road by the Uma-oya ; on the Batticaloa side by Padu Kumbura or Madura-oya ; on the Maturāṭa side by Halgaran-oya ; and on the Wallapana side by Madulla. The physical aspect of the whole district is strikingly beautiful, the country being diversified by chains of bold mountains and by undulating hills, which are separated by deep valleys, and extensive plains covered with lemon-grass and low jungle. Rivers and streams as well as springs abound every where, some of them forming beautiful cascades. In fact, the scenery of this part of the country surpasses every other portion of the mountain zone in variety and grandeur.

The most picturesque view is that from Ella, whence one looks down on the low country, studded as it is with nipple-shaped hills of various sizes, and stretching towards Hambantōṭa. On a clear day, the sea itself is visible, and vessels may be sometimes seen passing along the coast.

The hill scenery around the mountain pass of Haputale is unrivalled in magnificence and extent by any other in the Island. Our late Governor, Sir H. G. Ward, has so fully described the view from Haputale, that I quote his own words. He says :—

“I looked with regret, I confess, as I ascended the Pass, probably for the last time, at the magnificent wall of vegetation, towering up the side of the mountain, and about to disappear under the axe of the Planter, while below it, the view embraces the whole Mágam Pattuwa, with the Kattragam hills in the distance,—the Leeways at Bundela, and the white line of surf, beyond, at Kirinda.” (Sir H. G. Ward’s Minute of Inspection, 1858.) His predictions are being literally fulfilled; already several large Estates have been formed, and the bracing climate will tempt the Planter to remain long here, while the rich soil promises to reward him handsomely.

From Wilson’s Bungalow the scene is truly delightful, including an extensive view of deep valleys, and rushing streams, smooth grassy hills that undulate in succession, and mountains whose tops are covered with clouds. The Namanakuli mountain may be seen towering above the others on the Badulla side. From Dewihene Bungalow, (now in ruins,) which is 1,767 feet above Badulla, and 4,110 feet above the level of the sea, an extensive view is obtained of the hills and valleys that stretch below, together with the lofty range of the Nuwara Eliya mountains in the long distance.

From the Kannavarella Estate we gain a view of the sea; and on a clear day, ships sailing along, may be seen. Altogether the view afforded by the variety of objects here is unsurpassed for grandeur.

From Weywelhena Bungalow a full panoramic view of the whole of the valley of Badulla is visible.

From Taldana Pass, 4 miles from Badulla, we notice a

chain of hills, covered with chena cultivation, the highest of which is Nārangala. The lower Badulla-road also may be seen winding along the Badulla-oya. From many other points grand and interesting prospects of the country may be easily commanded.

The town of Badulla is 2,600 feet above the level of the sea. It is 156 miles from Colombo viâ Nuwara Eliya; 84 miles from Kandy; 36 from Nuwara Eliya; 80 from Ratnapura; 76 from Hambantota; and 72 from Batticaloa.

*m. furl.*

The distance from Badulla to Attampitiya is	13	4
From Attampitiya to Wilson's Bungalow	11	2
From Wilson's Bungalow to Nuwara Eliya	13	0
From Nuwara Eliya to Ramboda	... 14	0
From Ramboda to Pussellāwa	... 10	0
From Pussellāwa to Gampola	... 10	3
From Gampola to Kandy	... 12	5

Distance from Badulla to Kandy	... 84	6
--------------------------------	--------	---

The town of Badulla is situated on a mound surrounded by an extensive valley extending two miles and of an elliptic form, and presenting a series of terraced paddy-fields of about 400 acres in extent, irrigated by the Badulla-oya and the hill streams,—the valley being a basin bounded by chains of hills covered with lemon-grass. Through the whole extent of the valley runs the Badulla-cya, a serpentine river. It enters the valley from the south-west, and as it proceeds towards the north, receives the small tributary streams known by the name of the Kuḍā-oya, Rambapota-oya, and it finally discharges itself into the Mahaveḷigaṇṇa.

The Badulla hills are of various elevations, from 400 to several thousand feet above the level of the sea, the highest being 6,700 feet: this is called Namunakuli Kanda, and is situated towards the south of Badulla; on its summit the *Rhododendron* is found growing in great abundance.

## ROADS AND COMMUNICATIONS.

The principal roads are the following:—The *Nuwara Eliya road*, which is the only one that affords the means of uninterrupted communication between Badulla and Kandy; on this road bullock carts may be constantly seen; but it is a very tedious and expensive route.

The *Lower Badulla road*; this passes along the Badulla-oya and Mahaveliganga, and over a flat country, and is undoubtedly the shortest to Kandy, being only 56 miles distant. It is intersected by streams which at times are swollen and which therefore render the road impassable during the rainy season. In many places rocks also form serious obstacles, which are not easy to remove so as to make the road passable for carts. The country traversed by this road is thinly populated, owing to the prevalence of fever for which it has gained notoriety.

The *Madulla road*. This is also a short approach to Kandy, but it is steep, narrow and dangerous.

The *Ratnapura, Hambantotta, and Batticaloa roads*. These lead to the low country.

The *Ratnapura road* runs over a comparatively flat country in a south-west direction. If this road be open for carts it will greatly facilitate communication with Colombo; while there will be provided also a cheap route from it to the Sanitarium of the Island, and in many other respects the country will be benefited. On each side of the road there is rich pasture land. It is studded too with numerous and populous villages. This ought to be the proper outlet for the District.

Sir H. G. Ward, who had personally inspected all the different lines of communication with Badulla observes in his Minute of Inspection of 1859, that, "The Haputale road still continues to be the favorite object of the Planters. The large amount of land sold near Haputale (5,000 acres), and the increase in the Coffee Crops of the

Badulla District which has risen from 10,000 cwts. in 1855 to 20,000 cwts., and would probably advance much more rapidly, if a better line of communication with Colombo were opened, give to this proposal a greater claim to consideration than it had when first brought before me."

The *Hambantota road* which runs southward, is in some parts very steep and extremely difficult to be converted into a cart-road.

*Batticaloa road.* Carts may proceed twelve miles from Badulla: beyond that distance it is a mere jungle path used for tavalams. It proceeds in a north-east direction.

The *minor roads* are numerous, branching off in various directions to the villages around.

The whole aspect of the District is rapidly undergoing great changes. Numerous Coffee Estates are springing up in all the available land adapted for the cultivation of this staple article of the Commerce of this Island: consequently the District is attracting great attention, and it becomes necessary, that its interests be carefully studied. But it must be observed that the improvement of the country has not kept pace with its extent and importance as a Coffee growing district. This has been owing to two causes. The distance from the sea coast is considerable, and travelling by the great mountain pass, *via* Nuwara Eliya, is both tedious and expensive, the progress therefore, of the District, has been much retarded. It labours under the disadvantages consequent on the want of easier and cheaper transport and the town is not so large and important as it ought to be, considering the large capital laid out in the District for the production of Coffee. The rate of transport is very high; cart hire from Badulla to Colombo varies from £6 to £7 *via* Nuwara Eliya, and a cart takes longer to reach Colombo than the Overland Mail to England: and even then it is attended with uncertainty and losses, especially during the wet weather. Owing to the expense and difficulty of trans-



port, trades-people and others are discouraged from settling in Badulla, which of course renders living fearfully expensive, every article of consumption being at an exorbitant price. But with the many difficulties to be contended with, I have yet had the pleasure, since my residence in Badulla, of witnessing many material improvements. New roads and bridges to facilitate communication with the district have been constructed; while the extension of the means of Irrigation is proving of pre-eminent service to the native population. Facilities are thus being afforded for bringing waste land under cultivation, and for the extensive production of paddy, which is the staple article of food among the people.

To no cause more than the unremitting zeal of the late Assistant Government Agent of Badulla,—and this is acknowledged throughout the District—are the improvements of the works of Irrigation to be attributed.

#### CLIMATE.

There are three seasons. First, the *Dry weather*, which commences in May and continues till the end of August: second, the *Wet weather*, which extends from September to December inclusive; and the third, the *Cold weather*, from January to the end of April. Of these four months of cold weather, the first two are the coldest. It may be stated that generally the thermometer ranges  $84^{\circ}$  in the shade during the usual dry weather: in the rainy season it is about  $80^{\circ}$  and often in the mornings as low as  $58^{\circ}$ ; and in the cold season it is  $56^{\circ}$ , and on the hills it has been observed to be as low as  $51^{\circ}$ .

The winds blowing in a north-easterly direction are generally cold and bracing, but they become hot and oppressive from May to September, which are the most unhealthy months of the year, especially if there be unusual heat and drought.

## HEALTH.

The low lands of the District are generally unhealthy, arising chiefly from the scarcity of water and food—causes which have tended to the gradual depopulation of this part of the District. Scrofulous ulcerations are frequently met among the natives of Wellaváya, &c. Those parts of Badulla which stretch towards Hambantota and Batticaloa are well-known as fever generating places.

Intermittent fever, or ague, is endemic in Wellaváya and Wellassa, which have a sandy and barren soil, and where wholesome water is scarce. The disease is become so common with the wretched inhabitants of these localities, that they consider themselves subjected only to a temporary inconvenience during the paroxysm, and when that has passed off they betake themselves to their usual avocations. Many of them have enlarged spleen as the consequence of protracted suffering from ague, and present the peculiar exsanguineous appearance which is characteristic of the disease.

Ague is also prevalent at Kataragama, whither people of every part of the Island and from the neighbouring continent of India, Buddhists as well as Hindús, resort annually in the month of July on pilgrimage to a Dévalé, which is sacred to the God Kandasvámi.

The Kataragama fever although generally of the intermittent type, soon merges into the remittent character, and destroys great numbers of the pilgrims, when cholera does not break out among them, as is usual on such occasions.

According to the Sinhalese idea of treating some severe cases of fever, no medicine is to be administered until some days have elapsed, when, unfortunately, the fatal symptoms have already supervened. Thus numbers die immediately after their return from the Kataragama festival.

I would here offer a few remarks on an indigenous febrifuge

plant, which I consider, after extensive and most careful trial, to be an efficacious medicine for fever. This statement may be startling to some, especially as the plant belongs to the *Cucurbitacea*, which have not a single member possessing any febrifuge properties, but as it is well-known, furnish some of the most powerful cathartics of the Pharmacopœia.

The plant in question is an annual creeping plant, and is known by the name of *Trichosanthes cucumerina*, Lin.; in Sinhalese it is called Dummélla, and grows plentifully in the feverish parts of Uva. It yields to boiling water a bitter principle almost like Gentian or Cherayta. The chemical composition may be thus stated. It contains Tannic Acid, which is also one of the principal constituents of the best kind of Cinchona bark. Bichloride of Mercury throws down a precipitate which is also a test for the Cinchona alkaloids.

An infusion of the dried plant is the form in which I use it, after the bowels have been freely moved by a dose of Pulv. Jalap Comp. or Senna and Epsom Salts.

*Infusion of Trichosanthes Cucumerina.*—Take of the dried plant, leaves and stem one ounce, boiling-water two pints. Infuse four hours in a covered vessel and strain. I use a copper decoction pot.

Dose two ounces, three times daily. It may be given during any stage of intermittent fever; when given in the cold or hot stage, I have found it efficacious in abating the severity of the symptoms. No more than the quantity required for each day ought to be prepared at once, as the infusion begins to ferment when kept beyond a few hours:—

The health of the District is in no small degree owing to the frequent showers of rain that fall over its whole extent. When there is a cessation of these showers, and dry and hot weather succeeds, much unhealthiness is the consequence, and it is then that epidemics break out.

As may be expected when there is a deficiency of the pluvial supply, the high temperature thus caused generates malaria,—the surrounding jungle giving rise to this, and sickness thus prevails : whereas showers of rain refresh the air, absorb the malaria rising from the ground, and thus remove morbid influences.

The people who inhabit the highlands of the District are remarkably healthy and vigorous, being supplied with abundance of water and food.

With regard to the health of the European settlers, an experience of seven years in medical charge of the station, has convinced me that the climate of the Badulla hills is not inimical to their constitution ; for I have had no case of Dysentery or other disease depending on climate, occurring among them ; and I think the climate of Badulla is certainly more favourable to the health of the Planters than that of the Kandyan Districts. More healthy, active, energetic men are seldom to be met with anywhere else.

#### POPULATION.

According to the Census of 1859, this amounted to 44,642 males and 38,619 females ; total, 83,261. The decrease of the population, especially of the low lands, is evident, and is proved by the remains of former Architectural Buildings, which shew that this part of the district of Badulla teemed with a numerous and industrious race of men, whose existence is thus mournfully attested by the traces of a departed greatness.

The subjoined extract from a Report on the present condition of Bintenna, by J. Bailey, Esq., Assistant Government Agent of Badulla, well describes the condition of the country and the character of the scanty population still surviving amid their ancient ruins.

“ Now everything is ruinous, and daily becoming more ruined, except the Dāgoba, which, during the last three years, there has been a violent

effort to restore. The jungle is encroaching on the once broad street: the slovenly hovels, wretched enough in their best style, are tumbling down—their walls cracked, their roofs falling in: here and there, a half-built house seems to shew an effort at improvement, given up in despair; and, over the place there is an air of desolation, which is inexpressibly melancholy. The people, too, are, for the most part, wretchedly poor and miserably inert."

#### PRINCIPAL DIVISIONS.

1. *Udukinda*, or Upper Úva includes Uḍapalāta, Dambavinipalāta, Gampaha Kóralé.

2. *Medakinda*, or Middle Úva, Mahápalāta, Dehivini-palāta, Kumbalvalpalāta.

3. *Yatikinda*, or Lower Úva, Bógodapalāta, Rilpalapalāta, Bəduḷapanguva, Passara Kóralé, Kandukara Koralé, Paṭṭipola Kóralé.

4. *Viyaḷuwa*, includes Oyapalāta, Soranātotapalāta, Piṭakola, Etulkoḷapalāta, Palwatta.

5. *Bintenna*, includes Bintenna, Araḷupitpalāta.

6. *Vellassa*, includes Wégampattuva, Nilgalapalāta, Mədagampattuva, Dambagallapalāta, Nikaveṭṭipalāta, Mahaveḍirāṭa.

7. *Yatikinda*, includes Buttalarata, Deyanagapaha, Paṇḍikkulama, Sittarama and Kataragama, Kōṅgala, Bintenna, Kandapalla Kóralé, Wellavāya.

*Number of Population in each Division framed on an official Return for 1853.*

	Males.	Females.	Total.
1. Uḍakinda ...	5,627	4,584	10,211
2. Mədakinda ...	2,214	2,485	4,699
3. Yatikinda ...	6,520	5,218	11,738
4. Viyaḷuwa ...	4,181	3,701	7,882
5. Bintenna ...	2,399	2,080	4,479
6. Vellassa ...	7,374	5,569	12,943
7. Yatikinda ...	3,639	3,480	7,119

---

Total ... 31,954      27,117      59,071

**Rájakáriya OR COMPULSORY DUTIES UNDER  
NATIVE RULE.**

It will be seen by the subsequent remarks, that every thing produced in the District was attained by a regular system of compulsory labour, which alone seems to have led the people to betake themselves to industrious pursuits; nay, the very personal comforts of the Royal family were administered to by such labour imposed on the inhabitants.

From some of the old natives of Badulla, I have ascertained a number of such *rájakáriya* as were formerly performed in the District, notice of which may perhaps not be altogether uninteresting in connection with the subject of this paper.

1. *Hunu rájakáriya*.—To burn lime or chunam. This compulsory duty was performed by the people of the village called Hagilialle and in their own village.

2. *Hakuru rájakáriya*.—To make jaggery from the kitul palm. A work performed by the villagers of Kumbalvela and in their own village.

3. *Ágarí*.—To dig for precious stones. It was performed by the people of Yaṭapaláta at and near Nuwara Eliya, namely :—Vilmane, Sita Eliya, Bopattaláwa, Lindaoluva and Palalmana.

4. *Pili viyanavá*.—For weaving clothes from a species of shrub cotton which is carried on to this day at Kandapalla. Those of Uḍapaláta performed it in the village itself.

5. *Tel rájakáriya*.—Collecting oil seeds, which was performed by the people of Úva, and the oil extracted and sent to Kandy.

6. *Miris rájakáriya*.—The people of Viyaḷuwa were to collect chillies and send them to Kandy.

7. *Daḷumura-rájakariya*.—The people of Passara,

Angoda, Udvera, Panakana, also from Bombarabotuva in Sabaragamuwa supplied the King, at Kandy, with betel leaves.

8. *Yakada rájakáriya*.—To smelt iron and manufacture steel. This was performed by the people of Kandapalla in their own village, and at Sabaragamuwa.

9. *Íradu pangúwa*.—To make bows, arrows, rice pounders, handles for lances, and flagstaves which should have been beautifully lacquered. This was made by the people of Wadecona at the same village.

10. *Lunu rájakáriya*.—To manufacture saltpetre. The people of Lunugala proceeded to Gampaha for the purpose.

11. *Kuruveṭṭó*.—Elephant suppliers. The people of Tuppittia supplied elephants.

12. *Wagupanguveṭṭó*.—To search for Elephants. The people of Pussalgolle did the work.

13. *Aḷutpanneṭṭó*.—To blast rocks. The people of Aḷupanna Kumbura blasted rocks wherever they were called to do so.

14. *Sarakku dakvanavá*.—To cultivate condiments, &c., such as coriander, cummin, fennel, dill seed, ginger, anise, cress, or rata-aba: peas, kodomba, or barley. The people of Tennekunvela situated in Uḷukinda Uḍapaláta were to cultivate them. They were also cultivated at Maturáṭa and Bómbara, near Nuwara Eliya. Rája Ráma was a Malabar who was employed to cultivate the condiments.

15. *Bétgé*.—There were two Medical Stores, one at Badulla and the other at Kandy, which were supplied by the people of Badulla.

And a numbers of others of less importance.

#### COFFEE ESTATES.

The Coffee Estates lie in two different directions, namely, on the Badulla side, and the Haputale range.

Those on the Badulla side are :

Vévehinna	...	...	7½ miles from Badulla	
Ótumba	...	...	do	do
Pepolgashinna	...	...	do	do
Gavarakçlé	...	...	8½	do
Pupulé or Návela	...	...	10½	do
Kannavarella	...	...	12	do
Gavarakçlé East	...	...	12	do
Bēddegama (Spring				
Valley)	...	...	7½	do
Balagala	...	...	3	do
Glen Alpine	...	...	4	do
Kóttagoða (Maryland)	...	...	4	do
Veveſsa	...	...	5	do
Debēdda	...	...	8	do
Passara	...	...	12	do
Gónakçlé	...	...	12	do
Aygoða	...	...	12	do
Redipána	...	...	2	do
Elizabeth	...	...	2	do
Higgurugomuva	...	...	3	do
Náraḡgala	...	...	8	do
Unagala	...	...	3	do
Gónaḡaltēna	...	...	7	do
Dikbēdda	...	...	10	do
Uduvara	...	...	7	do
Kínakçlé	...	...	12	do
Hindagala	...	...	12	do
Mávalamēdda	...	...	3	do

On the Haputale side are :

Kahagolla	...	...	25 miles from Badulla.	
Haputale	...	...	27	do
Sherwood	...	...	28	do
Galkanda	...	...	29	do
Viháragolla	...	...	30	do
Fenton	...	...	33	do



Haiddummulla	...	...	35 miles from	Badulla
Lot No. 10	...	...	35	do
Kalupahana	...	...	35	do
Needwood	...	...	37	do
5 Estates opening at Lemastota.				
3 Estates at the back of Wilson's bungalow.				

The elevation of the Estates above the level of the sea, is from 2,400 to 4,800 feet.

The Badulla Estates which lie in an easterly direction are situated on spurs running out from Namunakuli-kanda, while those in a south-westerly direction are on the Haputale side.

The quantity of Coffee produced in the district is about 23,000 cwts. The heavy blossom appears in August and September. The principal crop is picked from April to July. A small crop, chiefly from young Coffee, is picked from September to December.

*Transport of Coffee.*—The produce is sent down to Colombo from April to September. The only road by which Coffee is sent by carts to Colombo is the Nuwara Eliya road. The general rate for a bushel of Parchment Coffee is 2s. A cart can take from 60 to 80 bushels, and in fine weather it reaches its destination after a journey of from 20 to 40 days. The wear and tear on this road are very great, to say nothing of the distance of 156 miles, to be travelled over a steep mountain pass. It is not unusual to see cart loaded with Coffee lying at the bottom of a precipice while the bullocks which had brought them have died from exhaustion. It is not likely that the cost of transport by this route will ever become less. It is sometimes enormous.

The Hambantota and Batticaloa roads are used for the transport of Coffee by tavalams. For a bushel of Parchment Coffee 1s. is charged: a bullock load is equal to 3 bushels.

A small quantity of Coffee is also sent by the road to Ratnapura. The importance and utility of this road as the proper outlet for the district, are now greater than

ever to the planting community, on whom the advancement of the district depends so much. The necessity therefore for opening it for wheel traffic cannot be over-rated. With such a road in existence the whole of the Coffee produced in the district will be sent through it, and the serious losses from long detention and consequent damage of the Coffee will be prevented.

The Coffee which is sent to Hambantota is shipped at that place from October to April, and that which is despatched to Batticaloa, from April to September.

*The rate labour, &c.*, on the estates varies from 7*d.* to 9*d.* per day, and on an average from 4,000 to 5,000 coolies are employed.

*Roads to the Estates.*—Some of the minor roads to the estates are in an unsatisfactory state. They are not only dangerous to travellers on horseback; but it is even difficult to send down the crop by them from the estates. This is owing to the rocks and the stones which are scattered about, and to the roads being cut up by water during wet weather.

#### COFFEE LAND IN THE BADULLA DISTRICT.

<i>Namunakūli, &amp;c. :</i>	Acres.	Acres.
Lands belonging to private parties ...	9,176	
Surveyed, yet unsold ... ..	1,282	
Unsurveyed, belonging to Govt., about ...	3,000	13,458
<i>Haputale :</i>		
Lands purchased by private parties ..	13,196	
Advertised, not sold ... ..	1,539	
Unsurveyed, belonging to Govt., about...	20,000	34,735
<i>Wilson's Bungalow :</i>		
Lands purchased ... ..	—	486
<i>Valapana or Udapussellawa :</i>		
Lands purchased ... ..	9,216	
Surveyed, yet unsold ... ..	1,176	10,392
Unsurveyed, belonging to Government, extent unknown... ..	—	

*Nāraṅgala :*

Lands purchased	...	...	...	...	—	Acres.	1,704
-----------------	-----	-----	-----	-----	---	--------	-------

*Madulsima, &c. :*

Unsurveyed, estimated by a Government							
Surveyor at 14,000 acres, but believed							
to exceed	...	...	...	...	—	30,000	
						Acres...	90,865

31st December, 1860.

## VEGETABLE PRODUCTS.

The Agricultural productions of the Natives for

1855 and 1859.

Paddy	... 481,849 bushels.	280,758 bushels.
Fine Grain	... 90,316 do.	16,593 do.
Coffee	... 77,197 do.	64,579 do.
Pepper	... 685 do.	465 do.
Mustard	... 16 do.	22 do.
Gram	... 201 do.	10 do.
Indian Corn	4,667 do.	16,388 do.
Cotton	... 3,817 lb.	1,001 lb
Tobacco	... 7,850 do.	2,020 do.
Onions	... 12,550 do.	5,800 do.
Potato	... 100 cwt.	8 cwt.

These figures have been obtained from official returns for 1855 and last year. I have inserted them here to give an idea of the quantities produced in the District.

## 1. VEGETABLE PRODUCTS USED FOR FOOD.

1. *Sturch.*

Cassava.

Arrowroot.

Kitul Sago, from the Jaggery palm.

Madupiti, from the Cycas Circinales.

Kurakkan, Eleusine Coracana.

Italian panicle, *Setaria Italica*, (Sip. *tunahál*).Millet, *Panicum Milliaceum*, (Sip. *iddal iriṅgu*).

Black Ulundu, *Phaseolus max* ;  
 Green Gram, — *radiatus* (Siy. *munēta*).  
 Bengal Gram, *Cicer Arietenum*, (Tam. *kadakai*).  
 Madras Horse Gram, *Glycine Tomentosa* (Siy. *kolū*).  
 Indian Corn, *Zea Mays*, (Siy. *iringu*).  
 Potatoe.  
 Edible roots.

## 2. Condiments.

Fennel, *Nigella sativa*, (Siy. *kaḷuduru*).  
 Coriander, *Coriandrum sativum*, (Siy. *kottamalli*).  
 Cummin, *Cuminum Cyminum*, (Siy. *mahāduru*).  
 Dill Seed, *Anethum Sowa*, allied to Dill Seed.  
 Ginger.  
 Mustard.  
 Black Pepper.  
 Cardamom.  
 Garlic.  
 Anise, *Pimpinella anisum*, (Siy. *asamōdagam*).  
 Onion,  
 Capsicum.  
 Turmeric, *Curcuma longa*.

## II. USED IN THE ARTS.

### I. Gums and Resins.

Gum of the Wood-apple, *Feronia Elephantum*.  
 Gum Kino, *Pterocarpus Marsupium*.  
 Gamboge, *Garcinia Morella*, (Siy. *gokaṭu*).  
 Black Varnish, *Semicarpus Gardneri*, (Siy. *baduḷlu-gaha*).  
 Gum of Satin Wood, *Chloroxylon Swietenia*, (Siy. *buruta*).  
 Gum of Ebony, *Diospyros melanoxylon*, (Siy. *kaḷuvara*).  
 For a description of the Gums, see Asiatic Society's  
 Journal for 1855, p. 71.

### 2. Oils.

Gingelly Oil ; obtainable from *Vialuva*  
 Castor Oil ; common.

Ceylon Oak oil, *Schlerichera trijuga* : from *Vialuva* : fruit ripens in October and November.

Mustard Oil ; common.

Kekuna Oil, *Aleurites triloba* : common ; fruit ripens in April.

Cinnamon suet ; extracted from the fruit.

Gamboge oil ; extracted from the fruit.

Wild Nutmeg Oil ; extracted from the fruit.

Kudadavula Oil ; ditto ; fruit ripens in September.

Maḍol Oil, *Garcinia echinocarpa* : fruit ripens in September and October.

Mihiriya, *Isonandra* Sp. : fruit ripens in October.

Kina oil, *Calophyllum tomentosum* : ditto : fruit ripens in September and October.

Domba Oil, *Calophyllum inophyllum* ; from Velassa.

Telambu Oil, *Sterculia foetida* : from Teldepiya.

### 3. *Dyes.*

Indian Madder, or Munjeet, *Rubia cordifolia*.

Indigo, *Indigofera tinctoria*.

Sappan, *Cæsalpinia sappan*.

Arnotto, *Bixa orellana*.

Morinda, *Morinda exserta*.

Turmeric, *Curcuma longa*.

Bulu, *Terminalia bellerica*.

Korakaha, *Memecylon umbellatum*.

Milkhedge, *Euphorbia tirucalli*.

### 4. *Fibres.*

Niyanda, *Sanseveira zeylanica*.

Pine Apple, *Ananassa sativa*.

Mudar, *Calotropis gigantea*.

Plantain, *Musa paradisiaca*.

Nettle, *Urtica heterophylla*.

Horse-hair-like fibre of the Kitul, *Caryota urens*.

New material for the manufacture of Paper.

Barks for bagging, from the *Entada Purasætha* ; *Gyrinops walla* ; *Gnidia eriocephala* ; *Antiaris saccidora* (Sip. *ritigaha*) ; *Pandanus odoratissimus*, &c.

## ANIMAL PRODUCTS.

Lac, Cherries Lasca.

Wax.

Honey.

Chetah Skins.

## MINERALS.

Lime Stone.

Corundum, or Cinnamon Stone.

Talc.

Plumbago.

Iron Ore.

Sulphuret of Iron.

Saltpetre Earth.

Plastic Clays.

I shall briefly notice some of the remarkable natural products indigenous to the district.

## VEGETABLES.

It has been justly observed by an eminent authority, that "However luxuriantly a country may be covered with valuable plants in the wild state, it is only by special culture that the thousands of textiles we require can be furnished. The existence in the wild state of such plants afford sound foundation for the presumption, that these, when cultivated under similar conditions of climate and soil, will reward the labour of the husbandman.\*

*Meal Sago*, from the Jaggery Palm.—This is deserving of attention as an article of diet, being found in the district of Colombo also. But a better mode than that known to the natives must be resorted to to render it clean and pure. As prepared by the natives, it is of a brown colour, mixed with pith and the woody fibre of the stem.

A superior article can be manufactured by pounding the pith when fresh, and straining it through cloth in

---

\* J. Forbes Wilson, A.M., M.D., Reporter on the Products of India, in *Journal of Society of Arts*, 10th May, 1860.

a large vessel containing water. A good deal of astringent matter will be found in the starch, to which it gives a brown colour. This may be removed by mixing the starch with the white of eggs, which precipitates the tannin, and by straining again the fine pure starch may be obtained. It will be found more glutinous than common sago.

In the month of January, during the rainy weather, the Kitul abounds with starch, which, however, is not found in every tree. The natives discover its presence in a tree by the whiteness of its leaves and petiole, also by boring a hole in the stem and extracting the pith. The Siphalese make use of the flour for food after boiling it in steam, which changes it into a gum-like mass.\*

*Kitul Jelly*.—Dissolve a tea spoonful of the starch with a little cold water, and pour over it four ounces, or two wineglassfuls of boiling water, and keep stirring till it jellies; then flavour it with milk and sugar.

*Madupiti*, from the *Cycas Circinalis*.—The Siphalese in the Uva District prepare from this an inferior kind of starch. The fresh kernels are cut in slices and well dried in the sun, before they are fit for use: otherwise they have an intoxicating effect and produce vomiting and diarrhœa. The poorer classes generally use the flour, which is prepared by pounding the kernels. It is also boiled in steam and eaten by patients suffering from bowel complaint and hæmorrhoids, for which it is highly esteemed by the natives as the best medicine. I have given the flour made into porridge in cases of chronic dysentery, and from the few trials that I have made, I think favourably of its effect, in restraining inordinate purging such as is often beyond the control of the usual astringent medicines. The tree grows plentifully in Vialawa.

*Barley* was also cultivated in parts of Udukinda in the vicinity of Wilson's Bungalow, by Brahmins, who went

\* *Vide Observations on the Vegetable Products of Ceylon*, p. 33.

under the designation of "*Rājakāriya*," and who were employed by the King of Kandy for the purpose. It was first cultivated in Tennakón Vela, and is now found in Ambavela and Waugala. In the last-mentioned place it is still cultivated by the descendants of the said "*Rājakāriya*" who are now become Siṅhalese by intermarriage. It is called *kotomba*, or *yava*, and is cultivated in October and November, and gathered after seven months. The soil is manured with cow dung.

From the seeds of the *Nymphæa stellata*, the people at Bintenna prepare starch, which they use during times of scarcity. They also use a decoction of the seed in dysentery. The seeds are collected from tanks from June to September.

The process by which Kitul toddy drawers in Úva increase the flow of the juice of blossoms, or force it out from unproductive ones, deserves to be noticed:—The process is called "*Kitul mala behet tiyanavá*."

Black pepper, ginger, burnt coconut, or old dried coconut, garlic, and chilli, are all roasted together, and being ground with the juice of a kind of lime, *nasnāran*, the mass is made into a ball. Then take the leaves of a species of Arum called in Siṅhalese *sudu ala kola* and boil them in a little of the lime juice. Make five pegs an inch long of five varieties of lime wood, which they call *paspēngiri-ul-paka*, and two pegs of Cinnamon wood, and a tree called *Ittu*. These pegs are only used to increase the flow of the juice. But to force out the juice from unproductive blossoms, drive into the flower stalk two pegs of *ratneṭṭul* (PLUMBAGO ROSEA) and *aṅkenda*.

When the pegs are ready, cut a groove into the flower stalk, three inches long, one inch deep, and one inch broad. To the half of the groove near the stem apply the spice ball above described; to the other half, the boiled leaves of the Arum, into which the pegs are to be driven,



and roll a piece of mat over the stalk and cut out a ring from the spadix an inch from the stalk. Apply a quantity of ashes of Areca leaves and *akmala*, which being well mixed with the syrup of the kitul juice is rubbed over the part of the blossom which had not spread out, and allow to dry four days: on the other part of the flower roll down the bark of the *Naha* (*GNIDIA ERIOCEPHALA*) and then cut off the end of the flower, four days after which the juice begins to flow.

A kitul flower lasts two months, sometimes three. A flower yields four seers of toddy in twenty-four hours. It is very important to select the flower at the proper time; if it be too young or too old, no juice will be obtained. The best time for cutting is when it forms a curve and bulges out like a plantain flower.

I have since heard that a similar process is had recourse to in the Colombo District.

#### CONDIMENTS.

Nearly all the condiments that I have enumerated above are produced in Udakinde; in former times they were cultivated by Malabars who were employed by the King of Kandy, and received from him grants of land for that purpose.

#### GUMS.

Among these the Gum *kina* may be briefly noticed. In 1853, I first pointed out that the tree yielded the gum *kina* of Commerce. I drew public attention to the subject in a letter published in the *Ceylon Times* in April of the same year. It is true that the tree is mentioned in "Moon's Catalogue," page 52, but he seems not to have been aware of its useful properties.

I submitted specimens of the gum to the Chamber of Commerce, and they reported that it was of "good quality." It is sold in the London market at from 25s. to 47s. per cwt.

The difficulty of obtaining large quantities has arisen from the difficulty of securing the services of the Sinhalese to collect it.

The tree is found at Angoda, near Badulla, Teldeniya and Nilgalla or the Park.

*Black Varnish* is produced from a species of *Semicarpus*. This gum resin is equal to the black varnish of China for the purpose of lacquering. It exudes spontaneously from the stem and branches, and may also be obtained by making incisions in the bark. The resin is hard, breaks with a smooth shining fracture, burns with a bright flame, melts in fire, is soluble in turpentine, insoluble in water, and adheres strongly to wood and metal. The fresh juice is very acrid, inflaming the skin, and producing pustules.

To a saturated solution of Vateria resin (*Hal-dummala* of the Sinhalese) in oil of Turpentine, add by degrees small pieces of the black resin; put it into a bottle and shake it well until the whole is dissolved. Strain, and then apply it to wood or metal.

It belongs to the same natural family of plants as the Varnish tree of China and Japan, and possesses the same acrid properties when applied to the skin in a fresh state, as it exudes from the bark.

The resin exudes from natural fissures of the bark, and at first white, becomes afterwards black by exposure to the sun, hardening into masses of different sizes. The juice also drops on the ground around the tree forming flattened pieces of resin. My attention was drawn to this tree while stationed in Badulla in 1852. A soldier was cutting firewood in the neighbourhood of Badulla, and among other trees he felled the *Badulla-gaha* tree. The juice spurted out at each cut of the axe on his fore-arm; he returned home and washed himself; the next day he felt an itching in the arm, in the evening it was swollen red and painful; next morning he was unable to wear

his jacket and went to Hospital, a pustular eruption not unlike that produced by Tartar Emetic ointment having broken out in the places where the juice had touched the skin. He rapidly recovered, however, by the application of warm fomentations and olive oil.

Now this corrosive property is the same as that which is described by Rumphius as belonging to the Varnish tree of Sumatra and the Eastern Isles. He says:

"The exhalations of this tree are considered noxious, and the people of Macassar and other parts of Celebes in particular, entertain such a dread of it, that they dare not remain long, much less repose, under its shade. They say, that whoever receives the droppings from it will have his body swelled, and be afflicted with malignant sores. As, however, it furnishes the celebrated varnish, other people boldly repair to this tree, particularly the Chinese and the Tonquinese, who employ great precaution in collecting the resin, which is accomplished in the following manner. A number of Chinese proceed about evening to the place where the trees grow, which is always at a distance from the resort of man or animals; each selects a few, and inserts into the trunk two pieces of bamboo, sharpened at their points in such a manner as to penetrate the bark in a somewhat oblique direction. These remain all night, and are extracted before sun-rise the next morning, the tree yielding no juice during the day. The resin is found in greater or less quantity, according to the richness or poorness of the soil, and is obtained only at certain seasons of the year, particularly about the time of flowering. The people who collect it unite the fruit of their labor, and afterwards make a complete division of the whole, on which account this resin maintains a high price, a single pikul (containing a hundred catties) selling in those provinces of China which do not possess this tree, for two or three hundred dollars; in Tonkin and Camboja, however, it may be had for thirty, fifty, or sixty dollars. It is a custom among the Chinese when they approach this tree, first to rub the trunk lightly, before inserting the bamboo, wishing by this to shew that they are not afraid, for they say, that timid persons will sooner feel its noxious effects than those who are bold and fearless."

This tree is found growing both in low-lands and high-lands. In and around the Cinnamon Gardens; at Awisá-

wélla, Kuruwiṭi Kóralé, at Haṇwélla, in the Three Kóralés, and at Aṁbagamuwa, and in the Badulla district.

*Gamboge*.—The Gamboge tree grows plentifully, but the natives seldom extract its valuable gum. They extract oil from its fruit, which ripens in August, and use it for culinary purposes.

#### OILS.

The solid oils which are common in the district are the “Cinnamon suet,” obtained by boiling the Cinnamon fruit. “Gamboge oil,” also by boiling the fruit.

The wild Nutmeg (*Myristica tomentosa*) likewise yields a solid oil by boiling the kernel.

The *Madol* oil (*Garcinia echinocarpa*).

*Meheriya* oil (*Isonandra*, Sp.), are also fatty oils.

All these oils may, I think, be applied to the manufacturing of Soap.

#### DYES.

Indian Madder, or Munjeet. Among dyes, the Madder is the most remarkable. It grows in abundance in and around Badulla in scattered groups.

The natives have never used it as a dyeing plant, being wholly ignorant of its useful properties; they look upon it altogether as a weed.

In the early part of 1853, I submitted specimens to the Ceylon Chamber of Commerce. The plant grows in moist situations, the soil being a vegetable mould.

The valley of Badulla is remarkably fertile, abounding in limestone, and plants growing in such localities generally yield a beautiful bright red dye.

As the plant has hitherto been known to grow only in a wild state, time and experience will be required before the mode of cultivation best suited for it, can be ascertained. Excellent specimens of the root of the Madder grow in

Gampaha near Udapussellāwa. Specimens of the plant with a drawing of it were forwarded to Government, who sent them to the Chamber of Commerce in December 1853.

The drawing consisted of two parts, No. 1 represented all the parts of the plant to identify the species, with magnified views of the flower, and section of the fruit. No. 2 shewed the appearance and ramification of the root, so that its commercial value might be indicated. Both parts of the drawing were of natural size.\* The Indian Madder is not so valueless as some would make it appear. We learn from a high authority in such matters, that "the Madder is produced in Nepaul and in various districts of India. That which is brought to England, is imported from Culcutta, and is cultivated in the high lands about Natpore in Purneah. The roots are long and slender, and when broken appear of a red color. It is used in dyeing; the red which it produces being, though somewhat peculiar, nearly the same as that produced by European madder."

Dr. Bancroft says "that upon wool, or woollen cloth, its colour is brighter and livelier than upon cotton or linen; and, when proper mordants are used, nearly, perhaps quite, as permanent."

It is stated in the Jury Report, "that specimens of madder grown in localities deficient in lime were considered inferior." The Reports of the Juries of the Great Exhibition of 1851, on Indian Madder, are encouraging; they state, "that the Indian Madder is a valuable dye stuff, and hitherto not so well appreciated as it deserves, for some of the colours dyed with it are as permanent as those dyed with European Madder, and even more brilliant; its use is, however, gradually increasing, and it is unquestionably well worthy the attention of dyers."

For the following Oriental names of the Madder plant

---

\* For a full description of the Madder plant as found in Badulla, see "Observations of the Vegetable Products of Ceylon," page 17.

with their derivations, I am indebted to my brother, the Rev. S. D. J. Ondaatje, of Mátara.

*Manjétttha*—from the verb (මජ) *Maja*, to cleanse or purify, —and (ථ) *tha*, the participial termination of the feminine gender. This verb, besides its ideal meaning, conveys the notions of clearness, and brightness, and is used to express ideas connected with such qualities; hence the terms for red and redness come from this verb. In Pali, *Mañjétttha* (මංජේථ්ථ) means red; hence the creeper is called by that name: the quality of redness being expressed by the term.

*Vikasá*, (විකසා), from *vi*, a preposition, and *kasá*, to glitter, participial adjective, having a causal meaning: that which causes to shine, or glitter, or sparkle; hence a plant by which a bright red colour is imparted. These two words, (*Manjétttha*; *Vikasá*,) have the same signification in Sanskrit.

*Raktáñgi* (රක්තඛනි). This means a red body: *rakta*, red; *añga*, body or limb; and is applied to the plant.

*Padmaká*, (පද්මක). *Padma* means the red lotus; hence *Padmaká* is, having the property of redness, resembling the red lotus.

*Vastrabhúshana*. (වස්ත්‍රභූෂණ). This means, that which dyes cloth: *vastra* cloth or vestment; *bhúshana*, that which adorns or beautifies.

*Raktayashṭi*, (රක්තයෂ්ඨි): *rakta*, red; and *yashṭi*, stem; hence the word means, that which has a stem whose property is to impart redness.

#### *Elu Names.*

*Velmadata*. (වෙල්මද්දා): *vel*, a creeper; *madata*, red; hence a red dye imparting creeper. This is a derivative from the Pali, *mañjétttha*.

*Samangá*, (සමංග), means that which unites or blends with, and so a plant yielding a dye that colours any substance, by union with it.

*Yójanavalli*, (යොජනවලලි), means a creeper of the length of a mile; *yójana*, a mile, and *valli*, a creeper; because the creeper is of great length; a very appropriate name, seeing that the stem creeping on trees forms an interminable net-work.

*Sapan wood*, is found in abundance in Wellawáya, from whence it is taken to Hambantota for exportation.

*Morinda wood*, found in Wellassa. The native dyers of the Coast of India grind the root, and make an infusion, to which a piece of alum being added, the colour is changed from yellow to red. It is used as a red-dye for cotton cloth. It is the *Ahu-gaha* of the Singhalese, and *Nuná-marum* of the Tamils. In India it is known by the name of *Hal dye*. The Jury of the Great Exhibition have stated that "the colours dyed with the *Morinda* are for the most part not brilliant, but the colouring matter is far more permanent than many other red colours are, and with improved management would probably rival that of *Madder*; it would therefore perhaps be a useful dye stuff; it appears well worthy the attention of dyers."

*Arnotto*.—This is the produce of the *Bixa orellana*. The tree grows wild in and about Badulla, Passara, and Wellassa. The dye may be prepared by a simple and inexpensive process, namely, by steeping the seeds in water, and removing the colouring matter from them. The colouring matter which remains suspended in water is then boiled in large copper vessels to the consistency of syrup.

*Terminalia Chebula*.—The drupes are collected and taken down to Colombo from various parts of Uva. They are used to dye black, and are called "Gall nuts," or *Myrobalans*. They are used both in dyeing and tanning, and form one of the exports of the country; with alum it forms a yellow colour, and with the salts of iron black.

---

\* *Vide* "Observations on the Vegetable Products of Ceylon," 1853, p. 14.

It is remarkable that the word *triphalā*, commonly used by the Siphalese quacks to include decoction of the three Myrobalans, is a Sanskrit word, derived originally from a very ancient work, which according to Professor Wilson was written before the 9th or 10th century. (Royle.) It is stated by the Jury Report of the Madras Exhibition, that Gall nuts "have become a very important article of trade, and the consumption is now fully 2,000 tons annually." (Archer.)

*Indigo*.—I submitted specimens prepared from the *Indigofera tinctoria* growing wild at Dikwella, near the Badulla oya and paddy fields. It is found in groups. I collected a quantity of the plant in July 1855, and subjected it to the keeping process which is generally adopted in Bengal. The plants attain a good height, and from their luxuriant growth shew that the soil and climate of Badulla are well adapted for its cultivation.

I subjoin an extract from a letter, dated 9th October, 1855, from the Secretary of the Chamber of Commerce, Colombo.

"I am requested by the Committee of the Chamber of Commerce to acknowledge your letter of the 25th September, and to thank you for the sample of Indigo forwarded. I am also requested to inform you that the quality of it is good, taking into consideration the circumstances under which it has been prepared."

(Signed) R. NICOL."

#### FIBRES.

*Fibre* is the modification of single cells. Fibre from *endogens* is generally white, and contains more lignine or woody matter; hence it is less adapted to resist strain, and possesses less flexibility and softness than that from *exogens*.

The fibres of *endogens* most commonly applied to useful purposes are derived from leaves, as the aloes, agave, yucca or Adam's needle, sansevieria, fourcroya or gigantic aloe, ananas or pine-apple; and from stems, as the musa or plantain; and from the husk of seeds, as the coconut palm; and from the sheath of the leaves of the jaggery palm or kitul, the black horse-hair-like fibre. From the *exogens* we derive many valuable kinds, viz., flax, reha or China



grass cloth fibre, the *Urtica heterophylla* called vegetable wool, the *Calatropis gigantea* or mudar, *Hibiscus cannabinus*, from which gunny bags are made.

The extraction of fibre during the native rule was one of the services imposed on the Rodiya caste, who had to supply the stores of the King with ropes made of different fibres chiefly of the *Sansevieria* and *Kitul* or jaggery palm.

These people up to this day continue manufacturing fibre ropes, and they are very expert in extracting fibre with the hand, which I ascertained when I employed them for the purpose: but they are indolent and do not seem to care about working regularly.

One of the most remarkable fibres found in the districts is the *Sansevieria Zeylanica*, or bow string hemp. This plant grows in great abundance in the otherwise barren parts stretching towards Batticaloa, and the lower road to Kandy. It has 5, 6, 8, 10, 20, radical leaves, with dark matches or spots across, which disappear when they become old. The young leaves are nearly round, and the old ones are marked with longitudinal lines terminating on an obtuse point. Plants growing near streams yield good strong white fibre, the best kinds being obtained from the young leaves; these generally measure from one to three feet; the longest of those growing at Alipot, reached to four feet and a half.

: The natives have recourse to various methods of extracting the fibre, by scraping the leaves, and maceration. To two sticks fixed in the ground a piece of split bamboo with a sharp edge is fastened horizontally at a convenient height for the operator. He begins by scraping the base of the leaf, and twisting the fibre round a piece of stick, with which he holds the leaf firmly, and draws the upper surface towards him; thus scraping the pulp and with it removing much of the short fibre, which will make good tow. The Rodiyas substitute a buffalo's rib for the sharp-edged bamboo, placing

the concave side of the rib towards the operator, and using the same process as that I have already mentioned.

Another method is to scrape the leaf between two sharp pieces of bamboo placed one above the other, leaving a narrow interstice between them, through which the apex or narrow point of the leaf is drawn out. By this method of extracting the fibre the following results are obtained. One of the leaves yields 100 grains of clean fibre, and 70 grains of tow. Half a cwt. of leaves yields  $\frac{3}{4}$  lb. of fibre; cost of collecting leaves 7½d., cleaning 7½d.;  $\frac{3}{4}$  lb. of fibre costs 15d., 1 cwt. costs £9 6s. 8d. 250 leaves on an average weigh 20 lbs., and 500 yield  $\frac{1}{2}$  lb. fibre and  $\frac{1}{4}$  lb. tow;  $\frac{1}{2}$  cwt. contains 641 leaves. It may be stated generally, that 1 cwt. of leaves yields 1½ lb. of fibre; 75 lbs. of leaves can be cleaned by one man in a day, yielding 1 lb. of fibre and  $\frac{1}{2}$  lb. of tow; 1 lb. of leaves could be cleaned in 10 minutes.

By maceration, 1 lb. of leaves macerated for five days yielded 225 grains of fibre; 1 cwt. yielded 4 lbs. 4 oz. of fibre

The plant grows near Badulla at Ridipána, Donhindayi. Bóliyadda, and at Pisce, where it is found in perfection.

From the above it is scarcely necessary to remark, that the extraction of fibre by hand labour can never be made remunerative.

*Horse-hair-like fibre of the Kitul or Jaggery Palm.*—Very strong black fibre, like horse-hair, about 3 feet long. It is well adapted for making brushes, and for other purposes, for which horse-hair and bristle are used. I forwarded a brush made of this fibre to the Society in 1853; and I believe this first drew the attention of the merchants at Colombo to the subject, the brush having been shewn by Dr. Lamprey to one of them. Large quantities are now exported to England.

It is found in great abundance in Medikinda as high up as Haputale. Owing to strong winds which prevail in

Udūkinda the trees are blown down, and very few are to be found growing there.

*Antiaris Saccidora*.—A remarkable forest tree, called in Sinhalese *ritigaba*. By an ingenious though simple process, the natives prepare from the bark of this tree, material for very strong and elastic sacks for the purpose of carrying paddy, &c. The trees selected for the purpose are from  $\frac{3}{4}$  to 1 foot in diameter. Large ones, sometimes measuring as much as  $4\frac{1}{2}$  feet and more in diameter, are not so suitable.

When a tree has been fixed upon, the stem is cut down and divided into junks of the size required, and these having been firmly placed on the ground, the bark is well beaten with a stone or club, until the parenchymatous parts, or what is commonly called the cortical, comes off, leaving the liber or inner bark attached to the wood, which is then entirely separated from it by simply drawing it out with the hand. The bark thus obtained is of a fibrous structure, remarkably tough, presenting the appearance of a woven fabric like that of a stocking.\* No scientific description of the tree found in Ceylon was published previous to 1853, although it was well known to the people of Badulla.

*New Material for the Manufacture of Paper*.—In Eastern countries paper was manufactured from indigenous fibre long before it was introduced into Europe in the eleventh century. According to Col. Sykes, for 2,000 years paper had been made in India; never from rags, but always from fibre. Some years ago I brought to notice the mode adopted by the natives of Badulla for manufacturing paper.

When in 1853 the scarcity of rags in the European markets began to be felt, I commenced my experiments on various indigenous products found in the district of Badulla.†

---

\* *Vide* "Observations on the Vegetable Products of Ceylon," page 20-21.

† *Vide* Journal Asiatic Society, Ceylon, 1853, p. 74-75.

A small factory was set up five miles from Badulla, at Ambagaha oya, where the material was found in abundance, and paper was made by hand labour. I now lay before you a few specimens of the paper manufactured by me.

After spending nearly £200 I was obliged to abandon the manufacture, owing to the want of suitable machinery for reducing the raw material into pulp. With proper machinery the cost may be greatly reduced; and I believe, that the manufacture of paper with this new material will yield a good return. The pulp is not easily distinguishable from that made of rags; 90 grains made one sheet of paper of the size of foolscap; 12 sheets of paper made with it weighed 2 oz. 2 drs.; 1 ream 100 oz. Again 160 lbs. of the raw material made four reams of paper. Weight of 1 sheet of paper 70 grains; 8 lbs. 6 oz. of pulp are required to make 1 ream. 1 lb. of fresh material yields  $\frac{1}{4}$  lb. of paper pulp.

The specimens of paper manufactured by me were submitted by Government to the Stationery Committee, composed of Mr. Saunders, Captain Higgs, and Major Layard. These gentlemen reported in a letter to the honourable the Colonial Secretary, dated 8th August, 1856, that "the specimens might be rendered applicable to many useful purposes, such as for making envelopes, and printing licences, permits, way bills, &c.; the blotting paper would answer very well."

Mr. Bernard, Deputy Commissary General, in a letter to the Colonial Secretary, dated 25th August, 1857, states "with regard to the quality of the paper it appears to me, that even now they are much better than a great part of the paper manufactured in India, and extensively used in public offices there." I forwarded 1 cwt. of paper-pulp to the Chamber of Commerce, Colombo, on the 19th September, 1855. The Secretary informed me "that the 1 cwt. of the pulp is now

being shipped to London as a trial, and the result of the sale, and the broker's report thereon, shall be forwarded you on receipt." No information of the trial of the pulp in London has yet been communicated to me. The pulp was forwarded by Messrs. Armitage Brothers.

In the Appendix to this paper will be found Correspondence with Government on the subject of the manufacture of paper.

I have also tested the pulp as a substitute for making articles of papier maché.

*Cotton* is cultivated in Kandapalla, a dry part of the district; and formerly a very coarse kind of cotton cloth was manufactured there.

#### ANIMAL PRODUCTS.

*Lac* is found in the *Gyrocarpus Jacquinii*, and the people of Bintenne collect it from June to September; it is of good quality. The lac yields to boiling water a red dye, and with solution of alum strikes a beautiful carmine.

It is the produce of the *Chermes Lucca*. Lacker painting is carried on in Wadakonna, and much of the lac is used for this purpose. Walking sticks, handles for knives, and bows, are beautifully lackered.

This also was a "*Rajakariya*" in the district. A good deal of lac is obtained from Kandapalla where it is gathered in July.

#### MINERALS.

Lime-stone abounds very extensively throughout the district. During the native rule, lime was largely prepared at a place called Hāṅgiliella on the Nuwara Eliya road; its preparation being one of the compulsory duties imposed on the people.

#### DIGGING FOR PRECIOUS STONES.

This was also made one of the compulsory duties called "Agery," and the work was carried on at Nuwara Eliya in the following localities:—Vilmāna, Lindaoḷuva, Bagawan-talāwa, Sitā Eliya, Bópatalava, Mahā Eliya, Uḍavilmāna,

Mápillamána, Madwalamulla, Palalmána, and Patara-galdóva.

### IRON ORE.

There is abundance of iron ore in the following places :— Tolabówatta, Uḍawádiya (near Nahaville,) Hílpeṅkandura, Vaha Eliya in Kandapalla, Horagóna also in Kandapalla, Hattawalla in Bógoḍa.

The place where iron was smelted for the King of Kandy was at Kinagandóva in Tolabowatta, and it was made a compulsory labour performed by the people of Kandapalla and Sabaragamuwa.\* Magnetic iron ore is found at Kahaṭavela, near Paranagama, Yaṭakohilla, and on the road to Kataragama.

Sulphuret of Iron, from Bintenna, is composed of arsenic in a greater quantity than sulphur. Large masses of this substance are found in various parts of the low country. In passing along some of them, the attention is arrested by the not very pleasant odour of sulphureted hydrogen gas evolved by them.

It is the general belief of the people that sulphur ore exists in Walapana and Bintenna. I obtained a specimen of this ore from a Kandyan at Gampaha, but I have not been able to ascertain the locality from whence it was obtained. The preparation of sulphur was one of the compulsory duties which was rendered by the family of Tennegedara at Teripeḥe in Walapana.

### CORUNDUM, OR CINNAMON STONE.

This abounds in a place called Batgamaná, which is situated 12 miles from Alipot. The mineral is found in a stream called the *Agdre-kandura*. The natives prepare a useful hone by a composition of the powder of this mineral with lac : they melt the lac, and gradually add the powder, which when cooled becomes hard, and is shaped into different sizes.

\* For a description of the mode of manufacturing steel as adopted by the Sinhalese, *vide* Journal of the Asiatic Society of Ceylon, 1855, p. 73.

*Iron alum*, found as an efflorescence on a decomposing rock of gneiss called *pudama* near Teldeniya. The specimen contains more iron than alum.

*Plumbago* abounds in Bintenna.

#### NITRE EARTH.

There are numbers of nitriferous caverns in this district composed of large limestone rocks with subterranean passages, and containing heaps of mould-like earth emitting a strong ammoniacal odour. These heaps are the products of the dung of myriads of bats that have inhabited there from ages. By the action of the carbonate of lime in the limestone on the dung thus deposited, there results the well-known chemical compound of nitrate of lime such as is obtained from the artificial nitre beds of Europe. The Sinhalese, who call the earth *vavul pas*, "bats earth," have a mode of converting it into saltpetre not altogether dissimilar to the mode adopted in Europe at the present day, by which the nitrate of lime is converted, by means of ashes, into the nitrate of potash or saltpetre.

The manufacture of saltpetre was one of the compulsory labours imposed on the people of the district, and called *Lunu-rájakárya* which began in the month of June or July. The people of Lunu-gala, a village about four miles from Badulla, proceeded to a cave at Gampaha in Kandapalla kóralé and constructed sheds for the manufacture, they were assisted by others who furnished them with torches and oil for working in the dark caves.

The manufacturers of the nitre belonged to a caste called *Vahumpurayó*, who collected nitre earth and firewood: four or five *gamardás* supplied them with a quantity of kakune or kene oil, a dhoby furnished torches made of cloth and the dried spath of the coconut, and potters of Tunkinde supplied pots for carrying on the manufacture.

The following is the process adopted, which is exceedingly simple and inexpensive. They take a quantity of nitre

earth and mix it up with wood-ashes of the *Erythrina Indica* and *Terminalia alata*, or the petiole of the coconut ; putting the whole into a large talipot leaf previously shaped into the form of a funnel ; they then proceed to pour water over and filter this mixture of earth and ashes. This operation is continued until the water begins to look turbid, when it must at once cease, as this is an indication of the purely earthy character of the particles yet remaining in the leaf. The washing obtained in the way above described is generally very clean, possessing a strong ammoniacal odour, and containing nitrate of potash in solution. To crystallize this, they remove the washing into a large chatty in which it is boiled till it thickens and presents the appearance of "a mixture of flour and water;" in this state it is transferred to another earthen chatty having a rough surface within, called *koraha*, where it is left until crystallization takes place. But as the crystals thus formed do not look white and nice, they are dissolved once more in water, and allowed to crystallize again, when fine large crystals are produced. The saltpetre obtained in this way was used by the Kandians chiefly for making fireworks ; indeed the native term for it, *vedilunu* would indicate this much. Great attention appears to have been paid by the Singhalese to the Pyrotechnic art, on which they have numerous and elaborate compositions. The Chinese it is well-known, have always been famous for their fireworks, which are superior to those of other nations in variety and beauty. They likewise used saltpetre for this purpose before they became acquainted with the art of making gunpowder.

Dr. Davy's early scientific researches in Ceylon ought to be more generally known than they have been among the residents and others who are engaged in similar researches. The learned Doctor travelled through the length and breadth of the Island ; he had excellent opportunities for making personal observations, and his descriptions of



every thing he saw, examined, and described, are generally correct, even to this day. I quote from his valuable "Account of the Interior of Ceylon" published in 1821, respecting the Nitre Caves of Ceylon:—

"Nitre and Nitrat of lime are of frequent occurrence. The names of twenty-two places may be enumerated, in which saltpetre is produced, and in which it has been manufactured; and no doubt, besides these, there are many other spots that yield this salt, known to the natives, whose policy it is not to make us acquainted with them. Judging from four nitre caves that I have visited, and from the specimens of rocks of several more that I have examined, I believe that they are all very similar; and that the rock in which they occur, in every instance contains at least felspar and carbonate of lime; from the decomposition of the former of which, the alkaline base of the salt is generally derived, and by the peculiar influence of the latter, (yet not at all understood,) on the oxygen and azote of the atmosphere, the acid principal is generated. In confirmation of this statement, it may be remarked, that I have never been able to detect saltpetre, excepting superficially, where air could have access; never unaccompanied by nitrat of lime, or magnesia; in no rock, not containing lime and felspar; that the richness of the rock, in general, has been proportional to the abundance and intimate mixture of these two ingredients; and that the results of experiments which I have made on a variety of specimens of saltpetre-earth from Bengal, for which I am indebted to the kindness of Mr. Brown of Calcutta, were similar to those just mentioned, and tended to the same conclusions.

"Besides the essential circumstances of the presence of atmospheric air, lime, and an alkaline mineral, there are other circumstances which, if my observations be correct, greatly aid in the operation of forming the salt. I shall mention the most remarkable only, which appear to me to be slight humidity and the presence of a little animal matter. Perhaps, humidity is absolutely necessary; certainly, I have seen spots in a nitre cave, without any impregnation of saltpetre, which, excepting their great dryness, seemed to possess every requisite for the production of the salt. Animal matter, by those ignorant of chemistry, is considered of itself the chief source of nitre. Persuaded of this, my countrymen in Ceylon, with whom I conversed on the subject, generally attributed the saltpetre of the caves in question to the dung of bats, with which the caves are more or less infested. It is easy to refute such a notion; and to

shew, that the dung of these animals, like any animal matter, is not an essential, merely an assistant circumstance. For this purpose, it will be sufficient to remark, that in the nitre cave near Memoora in Doomberra, in a very compounded rock consisting of calcspar, felspar, quartz, mica, and tale, in a humid state exposed to the air, and slowly decomposing. I have found a rich impregnation of saltpetre, though quite free from the dung of bats, or any other animal matter; and conversely, that I have not been able to detect any traces of this salt in the dung of bats, that had accumulated in great quantity in an old forsaken pagodah.

“A description of the nitre caves which I have visited, will be found in another part of this work, and an account of the method employed by the natives, both in the manufacture of saltpetre and of gunpowder. I may here give the results of some analyses, that I have made, which will shew the composition, of the most productive nitre rock of Doomberra, of the most productive nitre earth of Ouva, and of the richest nitre earth of Bengal. The nitre rock of Doomberra was from the Memoora cave, the same as that before mentioned as free from animal matter; 100 parts of this very compounded rock were found to consist of—

2·4 nitrat of potash.  
0·7 nitrat of magnesia.  
0·2 sulphat of magnesia.  
9·4 water.  
26·3 carbonat of lime.  
60·7 earthy matter, insoluble in dilute nitric acid.

---

100·0

100 parts of the nitre earth, from the great cave in lower Ouva, near Wellaway, were found to consist of—

3·3 nitrat of potash, with traces of common salt and sulphat of lime.  
3·5 nitrat of lime.  
15·3 water.  
25·7 animal matter of difficult solubility.  
1·0 animal matter easily soluble in water.  
51·2 carbonat of lime and earthy matter.

---

100·0

100 parts of nitre earth from Bengal, from the district of Tirhoot, were found to consist of—

8·3 nitrat of potash.  
3·7 nitrat of lime.  
0·8 sulphat of lime, with a trace of iron.  
0·2 common salt.  
35·0 carbonat of lime, with trace of magnesia.  
40·0 earthy matter, insoluble in water and nitric acid.  
12·0 water, with a trace of vegetable matter.

---

100·0

"Nitrat of lime I have never met with, excepting in combination with nitre. Sulphat of magnesia I have found in one place only. viz., the nitre cave of Memoorra in Doombura. In the same cave, and no where else, I discovered alum, in minute quantity. I suspect that the acid of both these salts is derived from decomposing of pyrites, and that the magnesia of the sulphat is afforded by decomposing talc. This sulphat forms with the nitre, and crystallizes with it. It is carefully picked out and rejected by the native workmen who prepare the saltpetre, being ignorant of its value. A considerable quantity of it, equal to the best Epsom salt, might be procured in this cave, and I know no reason why it should not be collected."

## APPENDIX.

*Badulla, 19th July, 1856.*

SIR,—I beg leave to submit for the consideration of Government, that I have been since the year 1853 experimenting upon various indigonus vegetable products with the object of finding a material adapted for the manufacture of paper, and which could be obtained in quantity and at a cheap cost. And I am now able to say that I have succeeded in manufacturing the accompanying specimens of paper from a shrub which grows plentifully in the district of Uva. This paper it may be observed possesses the property of combining less weight with greater tenacity than that made of rags, and is peculiarly suited for a tropical climate.

2. With the very rude machinery I have at present, I am prepared to manufacture four or five reams per diem by a process similar to that adopted in England for making paper by hand.

Common foolscap is the largest size that can be made at present, and the rate at which such paper could be supplied would probably be less than the rate at which similar paper is usually procurable by Government.

3. A small Factory has been set up near Badulla, and the work carried on by a friend of mine who lives on the spot; and if the present rough paper is adapted for any public purposes, arrangements could be made to meet the demand. And with the aid of Government in the shape of a regular demand for such description of paper, I should hope to be able to produce paper of a superior quality by means of better machinery.

4. It may perhaps be considered premature to bring forward this matter at its present stage to the notice of Government, but as I have already laid out a considerable sum of money in experiments, and it not being in my power to continue them, I now respectfully

---

\* Davy, pp.

solicit the aid of Government in the manner about indicated ; feeling assured that such an humble attempt in developing the resources of the country will meet with the fostering protection of the Government whom I serve.

I have, &c.,

(Signed) W. C. ONDAATJE.

*To the Hon'ble the Colonial Secretary.*

*Colonial Secretary's Office,*

*Colombo, 13th August, 1856.*

SIR,—Referring to your letter of the 19th ultimo, I am directed to transmit to you copy of one from the Committee on Stationery.

I have, &c.,

(Signed) P. W. BRAYBROOKE.

Mr. W. C. ONDAATJE, Badulla.

*Stationery Committee,*

*Colombo, 18th August, 1856.*

SIR,—In reply to your letter of the 31st ultimo, forwarding for report one from Mr. W. C. Ondaatje, accompanied by specimens of paper made by him in Uva, we have the honor to state that in our opinion, the successful results which have attended Mr. Ondaatje's praiseworthy efforts to manufacture paper in this Island, are most creditable to him and deserving of every encouragement.

Of the specimens herewith returned those marked No. 1, 2, and 3 might be rendered applicable to many useful purposes, such as, for making envelopes and printing licenses, permits, way-bills, &c., while No. 4, would answer very well as blotting paper, and might probably be improved if made a little thicker.

In order however to ascertain whether this paper is likely to supersede the use of that at present applied to the purposes named, it will be necessary for Mr. Ondaatje to state the cost at which he can undertake to deliver it. We would further recommend that with this information a ream of the best description cut to size and of uniform colour, also, a ream of the blotting paper, be sent to the Commissariat Department that a fair trial may be made with it, and its utility more fully reported on.

We have, &c.,

(Signed) F. SAUNDERS,

„ JOSEPH HIGGS,

„ W. T. LAYARD.

(True Copy.)

(Signed) P. W. BRAYBROOKE.

*To the Hon'ble the Colonial Secretary.*

*Assistant Govt. Agent's Office,*

*Badulla, 31st January, 1857.*

SIR,—I have the honor to enclose specimens of paper manufactured by Mr. Medical Sub-Assistant Ondaatje.

2. His very praiseworthy exertions have been unceasing during the last three years. Considering that he has worked alone and against many disadvantages, there can be no doubt that his success has been very great. He has expended a large sum of money, near £200, in testing his experiments, and is on the point of giving up any further prosecution of them, in consequence of the want of machinery for reducing the fibre into fine pulp, the present manual labour for that purpose so greatly increasing the cost of the material as to preclude its competing, as an article of commerce, with other inferior fibres.

3. Though he is obliged for the present to abandon all thoughts of exporting the fibre to England, he is able to manufacture the paper, of which I enclose you specimens, in some quantity, and at very reasonable rates.

4. The headmen in all districts are now required to send returns, &c., which it is impossible they can do on *olas*: yet no paper is allowed them, and they are obliged to purchase it at their own cost.

Paper No. 1 and 2,  
2½ reams a month.

Blotting paper, 30  
reams a month.

No. 1 paper:  
In Colombo *rs. 6d*  
per ream.

In Kandy *rs. 6d.* per  
ream.

In Badulla *5s.* per  
ream.

No. 2 paper:  
In Colombo *5s.* per  
ream.

In Kandy *4s. 6d.* per  
ream.

In Badulla *4s.* per  
ream.

5. The paper marked No. 1 and 2 can be supplied by Mr. Ondaatje, in the quantities and at the prices mentioned in the margin, much cheaper rates than *lumberland*, (than which it is scarcely inferior in texture and to which it is superior in toughness,) is furnished to Government; which I believe is *7s. 6d.* per ream. He could also manufacture paper of demy size.

6. There can be no question, I think, that it is not right to call on headmen to make returns which require paper, and not to supply them with paper for the purpose. I have the honor to suggest, therefore, that you should, if you concur with me in my views on this subject, recommend to Government that Mr. Ondaatje be employed to supply paper for this purpose; for superseding the use of *olas* in the *Kachcheries* generally, and for any other use to which his paper can be put. Either description of paper would answer excellently for forms, vouchers, returns of births, deaths, population lists, and division officers' books; and the blotting paper (of which I enclose

Blotting paper.  
 In Colombo 8s.  
 In Kandy 7s. 6d.  
 In Badulla 7s. 6d.  
 N.B.—Blotting paper  
 is supplied to Go-  
 vernment at 13s.  
 6d., I believe.

a specimen.) I prefer to that supplied by Govern-  
 ment, and it possesses the additional recommend-  
 ation of being very much cheaper, as the note in  
 the margin will shew you. Were it a little thicker  
 it would be perfect.

7. I feel sure that His Excellency the Governor will be inclined  
 to look favourably on Mr. Ondaatje's praiseworthy exertions, sup-  
 ported, as I hope they will be by your recommendation, and I trust  
 that he will, if possible, be encouraged in his efforts to develop the  
 resources of the district; since from the results of his experiments,  
 there is every reason to believe the Colony will really benefit by his  
 prosecution of them.

I have &c.,  
 (Signed) J. BAILEY,  
 A. G. A.

*To the Government Agent, Kandy.*

*Government Agent's Office,  
 Kandy, 26th March, 1857.*

SIR,—With reference to your letter No. 23 of the 31st January last,  
 relative to the paper manufactured by Mr. Medical Sub-Assistant  
 Ondaatje, and enclosing specimens thereof, I have the honor to annex  
 for your information copy of a letter addressed by me to the Hon-  
 orable the Colonial Secretary on the subject.

I have, &c.,  
 (Signed) W. D. WRIGHT,  
*for Agent.*

*To the Assistant Govt. Agent, Badulla.*

*Government Agent's Office,  
 Kandy, March, 1857.*

SIR,—I have the honor to annex copy of a letter No. 23, of the  
 31st January last, from my Assistant at Badulla, relative to the paper  
 manufactured by Mr. Medical Sub-Assistant Ondaatje, enclosing speci-  
 mens thereof, which I also beg to enclose.

2. Since they were received by me, I have had the quality of the  
 paper marked No. 1 tested, and it will be seen that it receives  
 printing and writing inks equally well.

3. Were I in a position to show that the paper now forwarded is  
 cheaper than what is at present supplied to Government, for use  
 in the public offices in the Central Province, I would be happy to  
 support Mr. Bailey's suggestion, that Mr. Ondaatje be requested to  
 supply the paper as required. But I fear that such is not the case,

nor is it likely to be so, while Mr Ondaatje's machinery for reducing the fibre into pulp continues to be so defective.

4. I can therefore only submit these papers to the Governor, with the expression of my hope, that His Excellency will be able to obtain for Mr. Ondaatje, the active co-operation of other parties, in his praiseworthy attempts to develop, what may ultimately prove to be, a valuable Island manufacture.

I have, &c.,

(Signed) E. RAWDON POWER.

[True Copy.]

Agent.

To the Hon'ble the Colonial Secretary.

*Assistant Government Agent's Office.*

SIR,—With reference to the 3rd paragraph of the letter to the Colonial Secretary, copy of which was annexed to your letter No. 581 of the 28th ultimo, I have the honor to invite your attention to the 5th paragraph of my letter of the 31st January, No. 23.

2. In that letter I shew that Mr. Ondaatje professes himself ready to supply paper scarcely inferior to lumberhand, and excellent blotting paper, at prices considerably lower than paper of similar description is supplied to Government, and I now annex a Statement shewing in a tabular form the particulars of his offer.

3. I venture to suggest for the consideration of Government, whether it would not be worth while to give Mr. Ondaatje an opportunity of proving the value of his discovery, by permitting him to supply paper to the Kandy and Badulla Kachcheries, to a limited extent, provided he can give good security for the fulfilment of his engagement.

I have, &c.,

(Signed) J. BAILEY.

To the Government Agent, Kandy.

*Statement referred to—*

Description of Paper.	By whom supplied.	Cost per Ream.			Savings per ream to Govt. on No. 1 paper & blotting paper, if supplied by Mr. Ondaatje.		
		Colombo.	Kandy.	Badulla.	Colombo.	Kandy.	Badulla.
		s. d.	s. d.	s. d.			
Lumberhand...	Commissariat	7 6					
Blotting paper	Do.	13 4					
Paper No. 1...	Mr. Ondaatje	6 6	5 6	5 0			
Do. „ 2...	Do.						
Blotting paper	Do.						

*Diwitotewelle, 27th March, 1857.*

DEAR SIR,—I have directed that a copy of the letter which Mr. Power addressed to Government, respecting your paper, should be sent you. This is in reference to the letter which I wrote some time before the Governor came to Badulla. I can't help thinking Mr. Power is under some mistake, and that your paper *is* cheaper than the lumberland, and blotting paper supplied by Government. Please send me again (for I have left my memorandum in Badulla,) the prices of your and Government paper.

The Governor shewed me a letter he had written to the Under-Secretary of State, transmitting specimens of your paper and pulp, and strongly recommending your invention to his notice.

I have, &c.,  
(Signed) J. BAILEY,  
A. G. A.

W. C. ONDAATJIE, Esq., Badulla.

---

*Assistant Govt. Agent's Office,  
Badulla, 5th June, 1857.*

SIR,—With reference to former correspondence, I have the honor to annex for your information, copy of a letter No. 207, dated the 2nd instant, from the Government Agent, Kandy, to my address.

I have, &c.,  
(Signed) J. BAILEY,  
A. G. A.

W. C. ONDAATJIE, Esq., Badulla.

No. 207.

---

*Government Agent's Office,  
Kandy, 2nd June, 1857.*

SIR,—With reference to your letter No. 112, of the 7th April last, relative to the paper manufactured by Mr. Medical Sub-Assistant Ondaatjie, I have the honor to inform you, that I have submitted the whole Correspondence to Government, with a suggestion that the Deputy Commissary General be requested to report upon the subject.

I have, &c.,  
(Signed) E. RAWDON POWER,  
Agent.

*The Assistant Govt. Agent, Badulla*

No. 413.

---

*Government Agent's Office,  
Kandy, 12th September, 1857.*

SIR,—I have the honor to forward copy of a letter No. 422, of the 3rd instant, from the Honorable the Colonial Secretary, and of the enclosure



therein referred to, on the subject of the paper manufactured by Mr. Ondaatjie, and to request that you will be so good as to communicate the same to him.

I have, &c.,  
(Signed) W. D. WRIGHT,  
*for Agent.*

*The Assistant Govt. Agent, Badulla.*

No. 422.

*Colonial Secretary's Office,  
Colombo, 3rd September, 1857.*

SIR,—With reference to your letter No. 141, of the 26th March last, I am directed to transmit to you a letter received from the Deputy Commissary General, on the subject of the paper manufactured by Mr. Ondaatjie, and to request that the same may be communicated to him. That officer has been instructed to pay Mr. Ondaatjie for the paper supplied by him.

I have, &c.,  
(Signed) C. J. MACCARTHY.

*The Govt. Agent, Kandy.*

No. 207.

*Deputy Commissary General's Office,  
Colombo, 25th August, 1857.*

SIR,—The Correspondence herewith returned from the Government Agent at Kandy, and his Assistant at Badulla, respecting the specimens of paper manufactured by Mr. Ondaatjie, was referred to me with your letter of the 5th June last, and I should have replied to it sooner, but that I waited to be able to examine the paper lately received from England, and in the hope that the Invoice shewing the latest prices of paper would have arrived; but it has not yet reached me.

2. It appears to me that there are three distinct questions raised in the Correspondence.

1st.—The substitution to a certain “extent” (a difficult term to define) of Mr. Ondaatjie’s papers for the commoner descriptions of paper, such as Lumberhand, Common Foolscap, and Blotting Paper, which are now imported from England.

2nd.—The proposal to issue free of payment Mr. Ondaatjie’s paper to headmen in the districts for returns, or other documents for which either *olas* are now used, or for which they are not allowed stationery.

3rd.—The comparative price between Mr. Ondaatjie’s paper and imported paper.

3. It appears to me that the specimens of paper forwarded with the Government Agent’s letter of 26th March last, (No. 1, here-

with returned) are not equal in quality to the specimens forwarded in November last, just before I returned from England. Some of these latter specimens (No. 2) are herewith enclosed.

I have also put together some specimens of English and other imported paper, with the prices marked (No. 3).

4. With regard to the quality of Mr. Ondaatjie's papers, it appears to me that even now they are much better than a great part of the paper manufactured in India, and extensively used in public offices there. I would however offer the remark that as Mr. Ondaatje has made so much progress towards complete success in the manufacture of common paper, he might possibly with improved machinery be able to extend that improvement, by making the paper thinner and lighter. At present, it weighs rather more than half as much again as English paper of the same description and size. If the thickness and weight were reduced, I think it might become serviceable paper.

5. With regard to the second point, if His Excellency the Governor should deem it right, that stationery should be issued to the headmen for their returns, &c., doubtless, Mr. Ondaatjie's paper would answer the purpose exceedingly well. I was under the impression that one of the reasons given by Mr. Buller, the former Government Agent, for his large demand for stationery, was, that the numerous returns required to be furnished by the headmen required that stationery should be issued to them.

6. Lastly, with regard to comparative price, I should for the present exclude Colombo from consideration, but if Mr. Ondaatjie can supply paper equal, or rather superior, to the best of the specimens of common paper furnished by him, at 5s. a ream at Badulla, and at 5s. 6d. a ream at Kandy, and if he could also supply blotting paper made of the full size of the English blotting paper at a price increased in proportion to the increase of size, (taking his present specimen as worth 7s. at Badulla, and 7s. 6d. at Kandy), I strongly recommended that some of it should be supplied for the use of the Government Agent at Kandy, and of his Assistant at Badulla.

7. The envelopes I do not at present consider necessary, as half a sheet of paper answers the purpose quite as well and can be used twice, which is not the case with envelopes, added to which 2s. 6d. per 100 is too dear for them, as they can be made here for the Colonial Secretary's Office at 2s. a hundred.

8. In conclusion, I would beg to suggest that Mr. Ondaatjie be invited to endeavour to submit specimens of paper of a thinner

description for writing, but of the same size as those submitted last year, and also blotting of the size of the sheet of English blotting paper enclosed. If the new specimens be approved of, probably His Excellency might be disposed to allow the paper to be used by way of experiment in some of the public offices at Badulla and Kandy, in order to obtain the opinion of public officers there as to the prospect of their being able to use it with advantage.

9. Having received altogether about 29 quires of the Common Foolscap paper, and about 13 quires of Blotting paper, prepared by Mr. Ondaatjie and sent down here as specimens, I would suggest that he should now be paid for this experimental paper, at the rate proposed by him, namely, 6s. 6d. a ream for the former paper and 8s. for the latter; and I may probably be able to use up this quantity of it in my own department.

I have, &c,  
(Signed) W. D. BERNARD,  
D. C. G.

## THE DIFFERENCE BETWEEN THE PALI AND THE PRAKRIT-MAGADHI OF VARARUCHI.

BY JAMES D'ALWIS, ESQ., *Assistant Secretary.*

---

PALI is the name given in Ceylon, and some countries in western Asia, for the dialect of the Buddhist Scriptures, which was cultivated in the kingdom of *Māgadha*, or modern Behar, about the 6th century before the Christian era. The Siṅhalese, like the Burmese, use both *Pāli* and *Māgadhi* to express their sacred language; whilst Indian Grammarians designate one of the dramatic dialects, the *Māgadhi*, and also identify it with the language of *Māgadha*.\* Although, therefore, the *Pāli* and the *Māgadhi* are names for one and the same dialect; yet the language defined by Prakṛit Grammarians as *Māgadhi* is essentially different from the *Māgadhi* or *Pāli* of Ceylon, which, from the time it was banished from the country whence it derived its name, remains fixed as a dead language in this Island, unaffected by those changes which as a spoken language it has undergone in its migrations in India,—assuming at one time the style (as in the Nepāl Scriptures) of an “indescribable milange in which incorrect Sanskrit bristles with forms of which some are entirely Pāli and others popular”;† at another, the form of the Pillar dialect of Aśoka’s reign; and at last, the *Māgadhi* of the *Jains*.

These differences establish many important facts in the history of Asiatic languages; and moreover, unsettle the

---

\* See Cowell’s *Prākṛit Prakāsa*, p. 179, *et seq.*

† *L’Histoire du Bouddhisme Indien*, by M. Burnouf, p. 105.

opinion generally received at the present day, as to the age of the dramatic literature, and of Vararuchi, whom some have erroneously regarded as identical with *Kāṭyāyana*.\*

To such important questions, however, it is impossible to do justice within the confined limits of periodical literature. The object, therefore, of the following observations is, simply to shew the difference between the *Pāli*, otherwise called *Māgadhi*; and the so-called *Māgadhi* of the *Prākṛit* Grammarians.

Vararuchi, in his *Prākṛit Prakāsa*, which has been translated into English by Dr. Cowell, devotes a Chapter containing 15 Sections, to exhibit the differences between the *Māgadhi* and the *Sanskrit*; and the following observations are confined to comparisons between those laws and the distinguishing characteristics of the *Pāli*.

1. The first rule of Vararuchi is SHASOH SAH. In the *Pāli* there is no *s*: it has only the dental sibilants. The inapplicability of the rule, which states that in the peculiar dialect of *Prākṛit* termed *Māgadhi*, 's is substituted for *sh* or *s*' is therefore self-evident.

2. JO YAH. The occasional substitution of *y* for *j* is no more a peculiarity of the *Pāli* than of the *Sanskrit* or *Sinhalese*; e.g., *yamini* or *jamini* in *Sanskrit*; *yāma* or *jāma*, *Sinhalese* 'night.' The usual *Pāli* *nija* is written in the *Suttas* with a *y*, as *niyan puttān* 'own son.' Instances like these, are exceptions, not the rule, in those two languages. But neither in the instance given by Vararuchi, nor in the great majority of *Sanskrit* words with a *j*, is it changed into a *y* in the *Pāli*. The reverse of what is given by Vararuchi may be regarded as the rule. Thus, *jāyate* 'he is born,' is the same in the *Pāli*, and is not changed into *yāyade*. So likewise *rāja* is *rāja*, and not *rāya*, 'king'; *gaja* is *gaja* but not *gaya*, 'elephant'; *vajra* is *vajira*, but not *vayara*, 'diamond.' It is true that in words like *paryūshana* the

---

\* Cowell's *Prākṛit Prakāsa*, p. vii.

Pali form is *payyūshana*, and not *pajjausana*, as in the common Prakrit. This peculiarity in the Pali, however, does not indicate a change from *j* to *y*, but from *r* to *y*; the reason of which will be found noticed elsewhere.

3. The next rule, CHAVARGASYAS PRISHTATA TATHOCH ARANAH, seems to refer to a nicety in the pronunciation of the palatal letters, which we do not perceive in the Pāli; and therefore proceed to the

4. HṚIDAYASYA HADAKKAH. This is equally inapplicable to the Pāli. *Hṛidaya*, 'heart' never becomes *hadakka*, but *hadaya* in Pāli; so likewise *hrasva*, 'short,' is not *hadusva* but *rassa*; *hrī*, 'shame,' is not *hida* but *hirī*.

5. RYARJAYOR YYAH. The substitution here spoken of *yy* for *ry* and *rj* may be regarded as the exception (and that of very rare occurrence) rather than the rule in the Pāli. Thus *kāryam*, 'to be done,' is not *kayye* but *kariyan*; and *durjana*, 'wicked,' is not *duyyana* but *d-~~u~~-jana* in the Pāli. So again, *virya*, 'exertion,' becomes *viriya*; *bhārya*, *bhariya*, 'wife': *aivarya*, *issariya* 'prosperity,' *dhairya*, *dheriya* 'exertion'; and also *garjana* becomes *gajjana*, 'noise.'

6. KSHASYA SKAH. This is again different in the Pāli. Thus *rākshasah*, 'demon,' does not become *laskose* but *ra-khasò*; nor *dakshah*, 'clever,' *daske*, but *dakkhò*. So likewise *vriksha*, 'tree,' becomes *rukka* in the Pāli; *kshamà*, *kamà*, 'forgiveness'; *dakshina*, *dakkhina*, 'south'; *kshura*, *khura*, 'razor' *kshetra*, *khetta* 'field.' This peculiarity will be found explained in another part of our observations.\*

7. ASMA DAS SAU HAKE HAGE AHAKA. The Sanskrit *ahaṇ banāmi*, 'I speak,' is the same in the Pāli; and does not become, as stated here *hake*, *hage*, or *ahake*, *banāmi*.

8. ATA IDETAU LUKCHA. The Sanskrit *etaḥ* (root) *eshah* (nom:) is said to be changed in the Māgadhī into *esa*, and *su* being added to it=*èsa su*; and the latter affix being elided, the *a* in *esd* is changed into *i* or *e*. This is not a peculiarity

\* Vide infra. § 10.

of the *Pāli* in which *èta* (root) *èsu* (nom :) becomes *èsò ràjò*, (*esha ràjà* Sank.,) 'this king,' and not as in the *Prākṛit* *Māgadhi* *èsu làà*; and *esha purushah* Sanskrit, becomes *èsò purisò* in the *Pāli*, but not as in the *Prākṛit* *Māgadhi* *esà pulise*, 'this man.'

9. **KTANTAD USCHA** : which is rendered by Dr. Cowell into English as follows :—*u* is substituted when the affix *su* follows a word ending with the affix *kta*; and also (as we infer from the *oha* of the *Suttas*) we may optionally use the *i* or *e* of the preceding *Suttas*, or even elide the affix; as *hasidu* or *hasidi*, *haside* *hasida*, for *hasitah*, 'smiling.' It is only sufficient to state here that the *Pāli* knows no such thing, and that the Sanskrit *hasitah* is in the former simply changed into *hasito*.

10. **NASO HO VA DIRGHATWAMCHA**. That is to say *ha* is optionally substituted for *nās*, the affix of the genitive singular, and at the same time the preceding vowel is lengthened, as *pulisāha* or *pulisāssa dhane* for *purushasya dhanam*. 'the man's wealth.' The *Pāli* form of this is *purisassa dhanam*, wherein the Sanskrit inflexion *sya* is changed to *ssa*, for the simple reason that the *Pāli* dislikes the union of two consonants of different classes. It is further remarkable here that *dhane* of the *Prākṛit-Māgadhi* is *dhanam* (neuter) both in the Sanskrit and *Pāli*, in which, moreover, the cerebral *n* is not used.

11. **ADIRGHAS SAMBUDDHAU**. It is to be inferred from the examples given under this rule, that in the *Prākṛit-Māgadhi* dialect, the vocative inflexion *a* both in the singular and plural number is long. In the *Pāli*, however, the termination of the vocative *singular* may be either long or short, as *purisa āgachchha* or *purisā āgachchha*, 'O ! man come.\*'

12. **CHITTHASYA CHISHTAH**. In shewing the difference of the *Pāli* from the *Prākṛit-Māgadhi*, it is here sufficient simply to exhibit the *Pāli* forms of the given examples.

---

\* See Clough's *Bālavatāra*, p. 19.

1. Purushah tishṭhati.\* *Sanskrit*
2. Puriso titṭhati.     *Pāli*
3. Pulisè chishthadi.     *Mag : Prakr.*

13. KRINMRINGAMAM KTASYA DAH. Here again we cannot exhibit the difference of the Pāli from the Māgadhi Prakrit, better than by placing the given examples in juxtaposition with their Pāli forms.

Sanskrit *kṛitah*, 'done' *mṛitah*, 'dead' *gatah*, 'gone.'

Pali     *katò*                     *matò*                     *gatò.*

Prak-M : *kadè*                     *madè*                     *gadè.*

14. KṬWO DANIH. The following comparative view of the examples given under this rule, shows the relationship of the Pāli to the Sanskrit to be far nearer than that of the Prakrit-Māgadhi.

Sanskrit, *shadvà gatah* *kṛtvà gatah*

Pali,     *sahitvā gato* *katvā gatò*

Prak-M. *sahidàni gade* *karidàni àude.*

15. ŚRIGALASYA ŚĪLASIALESIALAKAH, the difference between the Sanskrit *śṛigūlah*, and the Pāli *sigulo* is simply that occasioned by the absence of the Sanskrit *ri* in the latter language. But Vararuchi gives the three following forms into which that word is changed in the Māgadhi-Prakrit, *siūlā siūlè siūlūkè.*

\* • The man stands.



## ON HEALTH AND DIET, WITH ESPECIAL REFERENCE TO CHILDREN AND YOUTHS, IN CEYLON.

BY BARCROFT BOAKE, B.A., *Vice-President, Asiatic  
Society, Ceylon.*

---

NONE who have had any opportunities of acquainting themselves with the past and present state of Ceylon, and who have taken any pains to avail themselves of those opportunities, can have failed to observe that the character of the climate has materially improved, as regards its effects upon the health and longevity of Europeans resident in the Island.

In former days, Trincomalee was regarded as so pestilential that it was the custom of Insurance Offices to make a special exception with reference to it stipulating that the policies which they issued were not to hold good if the person insured took up his residence there. It is not many years, indeed, since a gentleman who was making a voyage round the Island, felt himself compelled to remain on board during the whole time that the vessel in which he was a passenger remained in that port, fearing lest, by landing there he should vitiate the insurances which he had effected to a considerable amount upon his life. Many persons now prefer the climate of Trincomalee to that of Colombo.

In like manner, the road between this and Kandy was known to be very dangerous to any travellers who passed over it otherwise than rapidly and during the bright hours of the day. There are sundry grave-stones which stand close to

each other in the Galle Face Burying Ground, which are said to be the melancholy record of the effects of the march of a single Regiment from Kandy to Colombo. The loss of human life in the construction of that road, is said to have been something fearful, and that, not only amongst the native labourers, but also amongst the European officers under whom they worked. Even within the last twenty years it was commonly stated that the Resthouse-keeper at Añbépussa was obliged to keep up a double set of servants, as one-half were always sure to be laid up with fever. That road does not now bear so bad a character ; and the town of Kandy itself is also believed to have improved very much in salubrity, since it came into the possession of the English.

Much of this improvement is no doubt attributable to alterations which have taken place in the physical features of the country. Forests have been felled, swamps drained, and the observance of some sanitary regulations enforced upon the native inhabitants.

Something, too, perhaps not a little, is due to improved habits of life on the part of the European residents. The few who have been long enough in the Island to remember the state of things which has now, thank God, passed away, and is in great measure forgotten, have strange tales to tell of the excesses which were then committed by men filling positions, the present occupants of which, if their own better principles did not (as they doubtless would) prevent them from imitating the bad example of their predecessors, would be driven from office and from society by the force of public opinion.

The day is gone by when the Officers on the Staff of the Governor and Commander-in-Chief—appointments which in those days were always combined—would think it consistent with their position to endeavour, when invited, in attendance upon the Governor, to dine with an ecclesiastical dignitary to entrap their host into drinking to excess ; or

when, supposing that any persons could be found so lost to right feeling as to make such an attempt, their host would feel it necessary to have recourse to an artifice, in order to preserve sobriety which became him as a clergyman, without being guilty of what would be regarded as inhospitality towards his guests. The state of things of which such anecdotes are indicative has passed away, never, it is to be hoped, to return, and, as a consequence of its departure, liver complaints and fevers are less frequent and less deadly ; and it is now felt that, when temperance is observed, and ordinary prudence exercised in avoiding what are known to be causes of disease, life is not, to most constitutions, materially more insecure in this country than in Europe. It is quite possible that we may still have something to learn on this head, and that an improvement in medical practice, together with an increased diffusion of the knowledge of those physiological principles on which the preservation of health depends, may lead to such results as will induce Insurance Companies to grant policies on terms still more favourable than those which they at present offer to persons resident in Ceylon. It is not my intention, however, at present to enter upon this wide field, but merely to lay before you certain statistics connected with one branch of the subject, which my position has enabled me to procure.

While the increased security of the life of the adult European resident in Ceylon is generally admitted, it is still felt to be a hazardous experiment to attempt to bring up the children of European parents in this climate ; and many of us have had painful experience in our own families of the necessity of sending our children to England, when they have just arrived at that age when parental care is beginning to be of the greatest importance for the formation of their characters, and when the domestic affections can best be cultivated. If this could be shewn to be a mistake, arising

from an injudicious mode of treating our children, there are, I suppose, few European parents resident in the Island, who would not hail the discovery as removing one of the most painful circumstances attendant upon the expatriation which is their own lot in life. Now, this is just the conclusion to which I have been led, by an examination of the records of the Asylum for Military Orphan Boys.

That Institution has been established for about twenty years, during the last eighteen of which it has been under superintendence. There are at present 22 boys resident in it ; there have been as many as 31 or 32 at one time ; the average being not I think under the present number. During the last eighteen years, only four deaths have occurred in the establishment, two of which cannot be fairly regarded as belonging to its ordinary rate of mortality, inasmuch as one was the result of leprosy, (which must be regarded as an entirely exceptional case,) while the other was that of a deformed idiot, labouring under confirmed disease, who, being left entirely destitute, was received into the Asylum merely that he might die there in peace. The ordinary rate of mortality, therefore, making these deductions, is very little over one half per cent. per annum ; and even if we include the two extraordinary cases which I have mentioned, it will amount to no more than one in ninety-nine ; and even the higher of these rates can scarcely be regarded as indicating any peculiar unhealthiness in the climate. Nor does the appearance of the boys lead to a different conclusion from that suggested by the low rate of mortality amongst them. They do not, of course, exhibit the florid complexions which are looked for in healthy school-boys in Europe ; but they are deficient neither in strength, health, nor spirits, and amongst them might be pointed out some who, physically, are inferior to few who have been brought up in a more temperate climate. I could name one young man, who having entered the Asylum at the age of 12, left it when he was 19, in order to be employed on a Coconut

Estate near Jaffna ; after having been about four years in the Northern Province, he called upon me about a year ago, when on his way to take charge of an estate near Colombo. His appearance was such, that I remarked at the time, and the remark was confirmed by others who saw him, that had he just arrived by steamer at Galle, he would not be regarded as a bad specimen of a healthy European.

Another lad, the son of a European father by a half-caste mother, who, according to the record that we have of him in the Asylum, cannot now be more than nineteen, was apprenticed by me a few years ago to an Apothecary in Kandy. Not liking his employment, he ran away. After fruitless inquiries in several quarters, and getting one or two vessels searched, I gave him up as one of whom I was not likely to hear again. A short time ago, however, I received a letter from him, giving me some account of his adventures, and informing me that he was, when he wrote, a Serjeant in H. M. 24th Regiment, at present stationed in the Mauritius.

These facts seem to shew that the children of European parents can be reared in this country without any greater mortality than is usual in more favoured climates, and that those so reared are not inferior in spirit and energy to others of the same race. Why is it that we find the result so different with our own children ? I believe the true answer to this question to be, that we do not follow a judicious system in our treatment of them. We pamper their appetites—we indulge them with improper food at improper times—we coax them to eat when their stomachs reject the food that we press upon them, under the mistaken notion that the exhausting character of the climate renders necessary a larger supply of food than would suffice under a lower temperature.

Every thing at the Orphan School, on the other hand, is done by rule—no food of any kind is given, except at appointed hours. Unwholesome food is at all times carefully excluded. No indulgencies, in the way of a more delicate

diet, are allowed, except by the order of the Medical attendant, and then nothing more is given than he prescribes.

A Dietary was laid down for the Institution by the late Dr. Rowe, who was Principal Medical Officer in Ceylon, about ten years ago. A few trifling alterations have been made since then, and the subjoined table shews the manner in which the food of the boys is now regulated.

No extraordinary pains are taken to preserve the boys from exposure to the sun—indeed we are obliged, from the situation of the Asylum, to march them a distance of about a furlong at 8, 10, and 11 A.M., and again at 2 P.M. Their unusual health and strength is, I believe, under God's blessing, to be ascribed wholly to the judicious system that has been laid down for their management, and to the strictness with which that system has been adhered to.

If the publication of these remarks should have the effect of leading fond mothers to desist from the mistaken practice of pampering and over-feeding their children, and to adopt a regular and judicious system of feeding them, I entertain no doubt that the result will be the prevention of much of that suffering consequent upon the early breaking up of families, which, in too many instances, are never reunited on earth, and the members of which can scarcely ever acquire afterwards that domestic intimacy with each other, which is the result of early habitude.

---

*Dietary.*

7 A.M. Coffee, bread.

10 A.M. Coffee, bread, every morning. Eggs, jelly, butter, plantains, in rotation.

2½ P.M. Rice and beef-curry every day, occasionally roast beef and vegetables.

A bread pudding every Sunday.

5 P.M. Coffee and bread

*Quantity of Provisions allowed daily for each boy.*

Beef,	$\frac{3}{4}$ lb.	When eggs are given, each
Bread,	14 oz.	boy has two.
Coffee,	$\frac{1}{4}$ oz.	When butter is given, $1\frac{1}{2}$
Rice,	$\frac{1}{2}$ pint	lb. is divided amongst
Salt,	$\frac{1}{4}$ oz.	twenty-two.
Sugar,	2 oz.	
Milk,	$\frac{1}{4}$ bottle.	

## APPENDIX.





# PROCEEDINGS OF MEETINGS.

## GENERAL MEETING.

*December 17th, 1859.*

### *Present:*

J. STERLING, Esq., Acting Chief Justice, in the Chair.

The Secretary read a list of the books and Periodicals received since the last meeting, viz:—

Calcutta Review	...	...	2	Nos.
Journal of Madras Literary Society	...	2	„	
Do Bombay Geographical Society	...	1	„	
Do Asiatic Society of Bengal	...	1	„	
Do Asiatic Society of Shanghai	...	1	„	
Engineer's Journal	...	3	„	

On the system of Phonetic Alphabets, by J. E. Thompson, M.C.S., from the Author.

The following Contributions to the Museum were announced:—

Twelve specimens of Medicinal Oils of Ceylon, from Mr. C. P. Layard.

A number of Dyewoods and Dyestuffs, from Mr. H. Mead.

Samples of Plantation Coffee, from various gentlemen.

A Jungle Cat, from Lieut. Robertson.

A Cobra Capella, from Mr. J. Thompson.

The following gentlemen were then ballotted for, and declared elected Members of the Society:—

BOYD MOSS, Esq., F.R.C.S.	...	{ Proposed by Mr. J. Capper. Seconded by Mr. Jas. Alwis.
J. F. DICKSON, Esq., C.C.S.	...	{ Proposed by Mr. J. Capper. Seconded by the Rev. B. Boake.

F. B. MAINGUY, Esq., R.E.	..	{ Proposed by the Rev. B. Boake. Seconded by Mr. J. Maitland.
R. A. ROBINSON, Esq., ..	...	{ Proposed by Mr. J. Capper. Seconded by Mr. C. A. Lorenz.
and		
C. HILL, Esq. ....	...	{ Proposed by Mr. J. Maitland. Seconded by the Rev. J. Thurstan.

It was then moved and resolved, that Mr. C. P. Layard be elected President of this Society for the current year, in the room of the late Sir William Carpenter Rowe, and further, that the Rev. B. Boake, Mr. Lorenz, and Mr. Capper, do form a Sub-Committee to draw up a suitable expression of the Society's sense of the loss sustained by the death of its late President.

Mr. Maitland explained, that the sudden departure of Dr. Kelaart from Colombo, on special duty, prevented the reading of his paper on that day it would, however, be forthcoming at the General Meeting. He also exhibited a full-sized model of the iron and coir fencing proposed by Dr. Kelaart to be employed for the protection of the young Pearl Oysters on the freshly-formed beds.

Mr. Boyd Moss then read a paper on "Ceylon as a residence for Europeans, considered in reference to health."

---

### GENERAL MEETING.

*July 28th, 1860.*

---

#### *Present :*

The Honorable the CHIEF JUSTICE, as Vice-Patron, presided.

Sir E. Creasy, on taking the Chair, said :—" It is with great pride and pleasure that I have accepted the offer so kindly conveyed to me, through my friend Mr. Lorenz, of this honorable position in your Society. Although my own literary pursuits have been chiefly directed to the histories and languages of Europe, I have always taken a deep interest in Oriental ethnology, and in the historical evidences which the literature and the architectural monuments of the East supply, as to the early habitations and movements of the human race. It has also been my good fortune to have among my near connexions and friends, men, to whom the study of Asiatic antiquities and languages has been for years a favorite occupation : and among whom I have frequently heard the most important questions connected with Oriental lore discussed with ample learning and keen sagacity, and with all the freedom and vivacity of unrestrained familiar conversation. As soon as I was aware that Ceylon was to be my future

residence. I determined to endeavour to join this Society ; though I fear that the nature of my principal former studies, and the requirements on my time which my duties will create, are likely to make me a very inefficient member of your Association. But I shall, at least, watch your labours with cordial good-will and deep attention. Ceylon and Singhalese literature are so pre-eminently rich in ancient monuments and ancient records, that it is here we may hope to see good work done towards deciding many questions now earnestly discussed by the scholars and philologists of England and Germany.

Especially there is the great dispute which Gibbon indicated, and which is now warmly revived, whether the East really gave arts, letters, and civilization to the West, or whether all that is of any value in Oriental literature and art, was not derived from a north-western source. I intimate no opinion of my own on this or on the other great questions, as to the primary seats and early currents of population. But I know that they are questions on which many master minds are now intent, and I know that I see here an Association peculiarly qualified to throw light on them.

Your researches in Statistics, in Geology, and in the Fauna and Flora of this remarkable Island, command also the deepest interest. They have indeed an immediate practical value, which ensures for them the regard of many who would pay comparatively little heed to merely literary topics. I am sure that the time which you devote to the furtherance of the objects of this Society is employed with utility to others as well as with intellectual benefit to yourselves. I once more cordially thank you for the gratifying manner in which you have enrolled me in your ranks, and pledge myself that I will do all in my power to deserve it."

The following gentlemen were then ballotted for, and declared elected Members, viz :—

Col. OUVRY, C.B. ...	...	} Proposed by Mr. J. Capper.
		} Seconded by Mr. C. P. Layard.
Mons. P. GRIMBLot. ...	...	} Proposed by the Rev. B. Boake.
		} Seconded by Mr. J. Capper.
W. N. D. RAJAPAKSE, Esq.		} Proposed by Mr. C. A. Lorenz.
		} Seconded by Mr. C. P. Layard.
The Rev. C. MERSON. ...	...	} Proposed by Mr. J. Maitland.
		} Seconded by Mr. Jas. Alwis.

The Secretary placed on the table the following list of Donations to the Museum :—

Twenty-three land shells from Mr. C. P. Layard ; four New Zealand Pheasants, a specimen of Kandyan paper 40 years old, and three Ancient Singhalese Coins from the Honorable Major Skinner.

A set of Pearl Oyster Shells, of various ages, by the Secretary.

The following Books and Periodicals were reported as received since last meeting :—

A Report on Public Instruction in Bengal, from the Honorable the Colonial Secretary.

Meteorological Observations during the seven years ending 31st December, 1859, from R. Bullen, Esq., R.E.

The Asiatic Journal	...	...	...	5	Vols.
Report on the Natural History of the Pearl Oyster, by Dr. Kelaart	...	...	...	1	„
Romanic Alphabets	...	...	...	1	„
An Enumeration of Ceylon Plants, by G. H. K. Thwaites	...	...	...	1	„
The Calcutta Review	...	...	...	2	Nos.
Journal of the Asiatic Society of Bengal	...	...	...	3	„
Transactions of the Bombay Geographical So- ciety	...	...	...	1	„
Journal of the Madras Literary Society	...	...	...	1	„
Journal of the Geological Society of London	...	...	...	8	„
Journal of the Statistical Society of London	...	...	...	8	„
The Engineer's Journal	...	...	...	8	„

Major Skinner said, that he had received a communication from Sir W. Denison, the Governor of New South Wales, who was desirous that an exchange of specimens should take place between the Public Museum of Sydney and the Ceylon Asiatic Society, and he therefore begged to move the following resolution :—

“ That the Curator and Secretary be requested to communicate with the authorities of the Museum at Sydney, with the view to establishing a system of Exchanges.”

The resolution having been seconded, was carried.

Mr. J. D' Alwis called the attention of the Meeting to the fact that there were several Chapters of the *Mahāwanso*, translated by the late Mr. George Turnour, that had never been published, in the hands of that gentleman's Executors. He wished to propose the following resolution, which was seconded and adopted :—

“ That the Secretary be requested to communicate with the Executors of the late Mr. Turnour, with a view to obtaining their permission to print such translated Chapters of the *Mahāwanso* as remain in manuscript in their hands.”

The Rev. Mr. Boake submitted the following resolution :—

That the following gentlemen be requested to form a Corresponding Committee, for the purpose of entering into communication with Scientific Societies in Europe and elsewhere, viz :—

The Honorable the Chief Justice,  
Mons. Grimblot,  
Mr. Capper."

Seconded by Mr. Lorenz, and carried.

Mr. W. Ferguson exhibited a dwarfed specimen of *Melia Azedarach*, Lin., and a plant *Holcus Sorghum*, making a few remarks respecting them.

The genus *Melia* consists of trees, the *M. Composita*, or *Lunumidella* of the Siphalese being well-known as a fast-growing and tall tree, the timber of which is so light, that it is generally used for outriggers to the fishing canoes, while the species of which a small specimen was exhibited, is well-known throughout Ceylon, as a tree generally from 10 to 20 feet in height, and commonly called the "Flowering Margosa," having large branched panicles of beautiful lilac-coloured flowers.

The small specimen shewn by Mr. Ferguson was taken up and dried early in May last, and was one of several plants raised from seeds sown only three months previously, (all of which struggled for existence during the late dry weather,) but only this one was observed to flower then ; but about a fortnight ago, six or seven more produced a single flower each in the same manner, some of them very large and partly monstrous.

The dried specimen shewn had still the cotyledons on ; when it flowered these were  $\frac{1}{2}$ -an-inch from the ground, a small pair of opposite leaves 1 inch, and another  $1\frac{1}{2}$  from the ground, while eight alternate leaves occupied other 2 inches of the stem, and then came the last leaf about  $\frac{1}{4}$  of an inch higher in the axil of which grew the sessile flower,—the whole height of the plant being only  $3\frac{1}{2}$  inches, the root, a single one, being about 5 inches long.

Mr. Ferguson considered this plant a good illustration of the principle, that flowers and seed vessels are merely modified forms of leaf.

In good soil and in ordinary weather, the plant in question would have become a small branching tree, but here its growth was arrested, and true to its vegetable instincts, if such a term can be used, it made desperate efforts to preserve its species by producing a flower. This flower occupies the place of the central bud of the plant ; it has no calyx, but the top leaf, in the axil of which it rests, has also departed from its normal form, having divided and grown round the flower, so as to form an involucre

for it. The rest of the flower, viz., petals, tube surrounding the stamens, the stamens and pistil, were a little different from their ordinary form, but in one sent to the Director of the Peradeniya Gardens the day before, the flower was much larger than ordinary, and was somewhat monstrous. These plants were grown in Mr. W. Ferguson's garden at Kollupitiya, and Mr. Ferguson has observed, that in some of them, the flowers and mid-leaf have dropped off, and the plants have taken a fresh start, but sending out two branches from the place just below where the flower was.

In connexion with the subject of dwarfed plants, Mr. Layard, the Government Agent for the Western Province, stated, that some years ago he procured from a native garden, a coconut plant of the common kind, about two Years old, which had flowers close to the ground.

The specimen of *Holcus* shown, was fully 12 feet high, and about one inch in diameter, having a large compact panicle of white seed on the summit, with several branches proceeding from the upper joints, while from the lower ones, clusters of aerial roots, like those of the screwpine, issued. The plant was taken from several growing in the garden behind the Government Offices in the Fort, raised from bazaar seeds, sown about three months previously.

Mr. W. C. Ondaatjie then read a paper on "Badulla, and its Productions," and Mr. J. D' Alwis an article on "Cinnamon."

---

## GENERAL MEETING,

*November 24th, 1860.*

### *Present :*

The Rev. B. BOAKE, Vice-President, in the Chair.

Rev. J. THURSTAN.  
P. COOMARASAMY, Esq.  
Mons. P. GRIMBLOT.  
L. NELL, Esq.

Colonel OUVRY.  
J. D' ALWIS, Esq.  
R. DAWSON, Esq.  
J. CAPPER, Esq.

The following Books and Periodicals were laid on the table :—*Madras Journal*, Pamphlet on the Dugong Oil, *Engineer's Journal*, *Meteorological Register*.

The Secretary called the attention of Members to the prospectus of Messrs. Schlagentweit's work on India and Upper Asia, forwarded by the publishers, and it was resolved that the work be subscribed for.

A Circular from the Secretary of State for the Colonies was also laid on the table, in which information was sought in respect to scientific works published in the Colony, Museums, &c. ; also a letter from Mr. D. Wilson.

handing a communication from the Batavian Society of Arts. Both these documents were referred to the Committee of Correspondence.

The Secretary laid before the Meeting copies of letters from the late Dr. Buist and Sir J. Emerson Tennent to the *Athenæum*, having reference to certain passages in the work on Ceylon by the latter, in which the presence of the Fresh Water Wells in the Jaffna Peninsula near the sea is accounted for, on the supposition that they are supplied from the sea; the water becoming deprived of its salt by the filtration through the coral mass around. Dr. Buist controverts this theory as opposed to the first principles of physics, whilst in reply, Sir Emerson Tennent urges the facts brought forward by De Witt, in the *Philosophical Magazine*, to shew that water containing considerable quantities of saline matter in solution, may, by percolating through great masses of porous strata during long periods, be gradually deprived of its salts to such an extent as probably to render even salt-water fresh. The publication of this controversy might probably lead to some further enquiry into the matter as regards the fresh-water wells at Jaffna.

The following gentlemen were then balloted for, and declared duly elected :—Mr. W. J. Sendall, Mr. W. C. Ondaatjie, Mr. C. P. D'Zilva, Mr. J. A. Caley, and Mr. R. Piachaud.

The undermentioned Papers were then read :—

“The difference of the Páli and Mágadhí dialects of Vararuchi,” by Mr. J. D' Alwis.

“On Health and Diet, with especial reference to Children and Youths in Ceylon,” by the Rev. B. Boake, B.A., Vice-President.

“On Hindú Philosophy,” by Mr. Coomarasamy.



## ANNIVERSARY MEETING.

*Saturday, July 6th, 1861.**Present :*

The Rev. B. BOAKE, in the Chair.

Colonel OUVRY.

R. V. DUNLOP, Esq.

P. COOMARASAMY, Esq.

N. D. SCHULTZE, Esq.

W. C. ONDAATJIE, Esq.

J. MAITLAND, Esq.

Rev. J. THURSTAN.

W. D. RAJAPAKSE, Esq.

Dr. Misso.

The Secretary proceeded to read the Report, as follows :—

In submitting their Report for the past year, your Committee have much pleasure in pointing attention to the steady increase in the Members of the Society, and especially to the fact, that amongst those who have joined during the present year, are gentlemen eminently qualified to advance the objects of this Institution.

Amongst the Papers read at the various meetings of the past season, may be found some possessing more than ordinary local interest,—on “Health and Disease of Ceylon”; on “Diet”; on “the District of Badulla and its Products”; and on “Cinnamon,”—whilst “Hindu Philosophy,” and the “Pali Dialects” have formed the objects of other Papers. The Society has received several interesting communications from the Government, one of which directed attention to the increasing value of the oil obtained from the “Dugong,” as a substitute for Cod Liver Oil, and will be found in the Appendix.

Your Society has been placed in communication with the Curator of the Public Museum of New South Wales, through Sir W. Denison, and it is hoped that this may prove the means of an interchange of specimens of the products of the two countries, to the advantage of both institutions. It is also in communication with the Batavian Society of Arts, to which body copies of the Journal have been sent. Your Committee have much pleasure in noticing the receipt from the Messrs. Schlagentweit of a portion of the great illustrated work which is to record their travels and observations in Upper India, and it has been resolved to recommend to you, that the abovenamed gentlemen be elected Honorary Members of your Society, with a view to mark the appreciation of their gift, and of the great labour and scientific research expended in their work.

The publication of the remaining chapters of the *Mahdwanso*, left in the hands of the Executors of the late Mr. George Turnour, has engaged the attention of your Committee, who have communicated to those gentlemen their desire to be allowed to publish the chapters in their hands, in the shape of an Appendix to the Society's Journal. To this request, however, no reply has yet been received.

The Society has also had its attention directed to the subject of "the Fresh Water Wells of Jaffna," through a correspondence which took place between Sir James Emerson Tennent and the late Dr. Buist, and which correspondence will be found in the Appendix to the forthcoming issue of the Society's Journal.

Your Committee cannot omit mention of the exhibition of Ceylon produce, held at the Queen's House in February last, under its direct management. The time allowed for collecting the many specimens exhibited was necessarily short, but your Committee were enabled by the active co-operation of gentlemen at outstations, to bring together a most interesting and instructive collection, illustrative of the industry and resources of the Western, Central, North-Western, and Southern Provinces. Many of the objects exhibited have been since placed in the Society's Museum, which is at length beginning to assume a proportion that will soon render a Catalogue necessary.

Your Committee have recently communicated with the chief Military authorities of the Island, with a view to ascertaining whether there would be any objection to the amalgamation of the Medical Museum with that of this Society, in the event of a qualified Curator being provided for the proper custody and enlargement of the collection; and your Committee, although not as yet in possession of any reply to their application, have grounds for believing that their request will be complied with.

Since the last Anniversary Meeting the Society has lost several valued members, foremost amongst whom may be named the late Sir William Carpenter Rowe, whose attachment to, and exertions on, behalf of the Society, are well known to all its members.

The Society has also experienced a loss in the death of one of its oldest and most industrious members, the late Mr. Simon Casie Chetty, who contributed some most valuable papers to your Journal, and by these and other literary labours gave evidence of not only an intimate acquaintance with Tamil literature, but of a spirit of industrious research, of patient investigation, and of scholarly discrimination, rarely to be met with in the East.

In recording their deep sense of these losses, the Committee are able, at the same time, to notice the accession to your body, of the present Chief Justice of Ceylon, who has already given an earnest of his good wishes on your behalf. Your Committee would also congratulate you on having obtained the valuable co-operation of so eminent a Pāli scholar as Monsieur Grimblot.

This gentleman has consented to undertake the duties of Joint Secretary, and we may reasonably hope, that by the aid of his Oriental acquirements, the future proceedings of this Society will take a wider range, and assume a more elevated tone, whilst by means of translations and republications of some of the standard Historical and Buddhistical works of Ceylon, you may be the means of aiding the students of Pāli literature in every part of the world. During the past year, the Society's Library has received many valuable additions, as may be seen by the Librarian's List.

The Museum has likewise been increased by many donations, chiefly of objects from the late Exhibition at Queen's House; but much yet remains to be done towards obtaining a collection of the many Raw Products of the Island, a large portion of which your Committee believe to be unknown to Europeans, but which might probably prove of considerable value as articles of export, or for local use.

Your Committee regret they are unable to report that the Society's Journal, for the past year, is in a very forward state, the great pressure of work in the Government Printing Office having prevented its progress until very recently.

It would appear that, if it be thought desirable that the Journal should be published with greater rapidity, and at more frequent intervals, it will be necessary that the Society undertake the printing at its own cost. Your Committee have commenced to reprint the earlier Numbers of the Journal, for which there exists an active demand both here and in Europe.

The Treasurer will place before you a statement of the accounts of the past year, from which it may be seen that there is a balance in hand of £80 11s. 9d.

In conclusion, your Committee beg to submit for your consideration, a list of the proposed Office-bearers for the ensuing year.

*Resolved* :—"That the Report now read be adopted and printed in the current Number of the Journal."

*Resolved* :—"That the following list of Office-bearers be adopted for the ensuing year."

Proposed by Dr. Misso.

Seconded by R. V. Dunlop, Esq.

*President* :

Sir EDWARD S. CREASY, Chief Justice.

*Vice-Presidents :*

The Rev. D. J. GOGERLY.

The Rev. B. BOAKE.

*Secretaries :*

Monsieur P. GRIMBLot.

J. CAPPER, Esq.

*Treasurer :*

C. A. LORENZ, Esq.

*Librarian :*

Monsieur P. GRIMBLot.

*Committee :*

C. P. LAYARD, Esq.

Colonel OUVRY.

J. F. DICKSON, Esq.

B. MOSS, Esq.

W. C. ONDAATJIE, Esq.

P. COOMARASAMY, Esq.

J. D'ALWIS, Esq.

R. DAWSON, Esq.

Rev. J. THURSTAN.

The following gentlemen were then proposed, and after a ballot, declared duly elected Members of the Society :—

Dr. R. Dane, P.M.O.

G. B. Capper, Esq.

The Proceedings were terminated by a vote of thanks to the Chairman.

LETTERS FROM SIR J. E. TENNENT AND DR. BUIST, TO  
THE "ATHENÆUM," RELATIVE TO THE FRESH  
WATER WELLS OF JAFFNA.

Allahabad, N. W. Province,

June 10, 1860.

IN this out-of-the-way quarter of the world, where we are only beginning to replace the books the mutineers burned, and are drawing cautiously on our bookseller, in case a catastrophe of the like kind should occur again, I trust that you will pardon me for turning to a work reviewed in your pages eight months ago,—Sir Emerson Tennent's "Ceylon,"—which I have not been able to peruse, and of which I can only speak from the extracts I have read in the *Athenæum* and the *Edinburgh Review*, both of October. But the few points I desire to take up are of general and permanent interest, and have hitherto, as it seems to me, not been noticed in the manner they deserve. In both the reviews referred to, I find the following notice of the musical sounds

heard in Chilka Lake, a salt-water creek close by Batticaloa, on the eastern shores of Ceylon :—

“I distinctly heard the sounds in question. They came up from the water like the gentle thrills of a musical chord, or the faint vibrations of a wine-glass, when its rim is rubbed by a wet finger. It was not one sustained note, but a multitude of tiny sounds, each clear and distinct in itself; the sweetest treble mingling with the lowest bass. On applying the ear to the wood-work of the boat, the vibration was greatly increased in volume by conduction. The sounds varied considerably at different points, as we moved across the lake, as if the number of the animals from which they proceeded was greater in particular spots; and occasionally we rowed out of hearing of them altogether, until, on returning to the original locality, the sounds were at once renewed.”

Will your readers oblige me by comparing this with the following note I published of Musical Fishes in a salt-water creek near Bombay, in the *Bombay Times* of January, 1847 :—

“A party lately crossing from the promontory in Salsette called the Neat's Tongue, to near Sewree, were, about sunset, struck by hearing long distinct sounds like the protracted booming of a distant bell, the dying cadence of an Eolian harp, the note of a pitch-pipe or pitch-fork, or any other long-drawn-out musical note. It was, at first, supposed to be music from Parell floating at intervals on the breeze; then it was perceived to come from all directions, almost in equal strength, and to arise from the surface of the water all around the vessel. The boatmen at once intimated that the sounds were produced by fish, abounding in the muddy creeks and shoals around Bombay and Salsette; they were perfectly well known, and very often heard. Accordingly, on inclining the ear towards the surface of the water, or, better still, by placing it close to the planks of the vessel, the notes appeared loud and distinct, and followed each other in constant succession. The boatmen next day produced specimens of the fish—a creature closely resembling in size and shape the fresh-water perch of the north of Europe—and spoke of them as plentiful and perfectly well known. It is hoped they may be procured alive, and the means afforded of determining how the musical sounds are produced and emitted, with other particulars of interest supposed new in Ichthyology. We shall be thankful to receive from our readers any information they can give us in regard to a phenomenon which does not appear to have been heretofore noticed, and which cannot fail to attract the attention of the naturalist. Of the perfect accuracy with which the singular facts above related have been given, no doubt will be entertained, when it is mentioned that the writer was one of a party of five intelligent persons, by all of whom they were most carefully observed, and the impressions of all of whom in regard to them were uniform. It is supposed that the fish are confined to particular localities—shallows, estuaries, and muddy creeks, rarely visited by Europeans; and that this is the reason why hitherto no mention, so far as we know, has been made of the peculiarity in any work on Natural History.”

Now, it was nearly impossible for Sir Emerson Tennent to have seen this, as it was altogether impossible for me to have known in 1847 anything about his visit to the Chilka Lake the following year; and both descriptions, which, so far as the sounds of the fish are concerned, are in perfect harmony, are those of independent observers speaking of the same phenomenon, which I doubt not in both cases admits of the same



solution. In 1858, the present Governor of Ceylon visited Chilka Lake; he was obviously not aware of what Sir E. Tennent had heard or seen ten years before; his book was not published till 1859. He gives the following account of the music in the water, which is as nearly as possible the same as had been previously given. Mr. Ward being once more a perfectly independent witness:—

“I ought not to take my leave of Batticaloa, which I may not have an opportunity of revisiting, without mentioning the natural phenomenon for which its lake is remarkable—the singing fish. I was too ill during my stay in 1857 to expose myself in the night air upon the water, and I confess that, in spite of the impression then made upon my fellow-travellers, amongst whom were Major Gen. Lockyer and Capt. Gosset, I went out upon the present occasion with a considerable amount of incredulity, and was the last to believe the evidence of my own senses; Dr. Johnston being satisfied as to the existence of a sound apparently proceeding from the water long before I could realise it. But after changing the position of the boat once or twice, there could be no doubt about the matter. The sound rose and swelled, and absolutely vibrated about us in a manner that left no question as to the fact, whatever may be the causes. Its character is indescribable. It is not like any other sound. It is only heard at night. It has nothing harmonious or musical about it. There are no modulations, no variety of notes, except what the increase and decrease in strength produced. As to its origin, nobody knows anything. It may be the fish, to whom it is popularly attributed. It may be the rush of air through rocks partially hollowed. There is nothing but conjecture to guide us in this respect. The results all can vouch for. And these results are certainly more distinct within a limited distance from the shore, though heard occasionally in deep water. I am no naturalist. I can only state what I personally saw and experienced. Others must explain it. Something similar, it is said, occurs in the Bay of Naples. It is strange that between Naples and Batticaloa there should be this one point of resemblance.”

Sir Emerson Tennent describes the same thing as heard by him at the same place in 1848; but he doubts if the sounds proceeded from fish, and ascribed them to shell-fish.

The following is an extract from a letter (February, 1849) I received a few weeks after the first notice had been published:—

“*Musical Fish.*—Sir,—In a late number of the *Times* I noticed some remarks respecting the musical fish, as they have been rather aptly termed; and it may be interesting to the readers of the *Times* to be informed, that the existence of such a phenomenon has been long known to the residents at Vizagapatam. I have heard the musical sounds, like prolonged notes on a harp, when rowing on the back water at that station; and they were generally supposed to proceed from the fish coming in contact with the sides of the boat. To the best of my recollection, the sounds were never heard at a distance from it.”—*Bombay Times*, Feb. 13.

Vizagapatam, on the Coromandel Coast, is 498 miles north of Madras, the shores abounding with shallow salt-water creeks, like those on the eastern side of Ceylon, and all along the Malabar Coast. I think that I have very clearly made out that musical fishes do exist in abundance;

and as it is very difficult to conceive in what way the sounds are made under water, it would be well to have the subject more minutely inquired into.

I find the following in the Journal of the Samarang. I greatly doubt if it be the same variety of fish that I have noticed that are referred to :—

“Dr. Adams, the surgeon and naturalist of the expedition, says :— ‘While on board the brig *Ariel*, then lying off the mouth of the river of Borneo, I had the good fortune to hear that solemn aquatic concert of the far-famed organ fish, or drum—a species of *Pogonias*. These singular fishes produce a loud monotonous singing sound, which rises and falls, sometimes dies away, or assumes a very low drumming character ; and the noise appeared to proceed mysteriously from the bottom of the vessel. This strange submarine chorus of fishes continued to amuse us for about a quarter of an hour, when the music, if so it may be called, suddenly ceased, probably on the dispersion of the band of performers.’”

Sir Emerson Tennent notices the fact of all the wells along shore which keep their water during the dry season, being below high-water mark, and that to a small extent they rise and fall with the tides ; and he assumes that they owe their water to the sea, which loses its saline matter by percolation. Nothing, surely, is more utterly opposed to the first principles of Physics than the doctrine, that salt held in chemical solution by water should be capable of being separated from it by the mechanical process of filtration. The phenomenon of tides in wells of moderate depth dug near the sea, is of universal occurrence all along the Malabar Coast, where the matter dug through is porous. It does not obtain in wells dug through trap. I have observed it hundreds of times at Bombay, and have often had occasion to describe it. The explanation is easy. The surface of the ground where the well is dug being always six or eight feet above high and twenty to twenty-six feet above low water, and being extremely spongy and porous down to where it comes in contact with the rock, or the blue-clay bed which commonly lies over the rock, it gets charged full of water during the rains. The superior length of column enables this to expel the sea water, a proceeding which must have been completed shortly after the emergence of the land from the sea ; while the interstices in the porous soil are so minute as to prevent the two mingling. As the saltiest sea water has only a specific gravity of 1.050, the fresh water ponded back from it requires only to be proportionally higher in level to create an equilibrium. With a greater head than this, it will push the wall of salt water before it, and flow off. Of all this I have seen abundant examples at Bombay. It would occupy too much of your space to describe them. After six or eight months of rainless weather, when the discharge from the soil becomes feeble, the wells all become more or less brackish, and the apparent tide increases.

The *Edinburgh Review* states that this theory of Sir E. Tennent's, of the desalinization of sea water by filtration (as already said, a phenomenon opposed to one of the first laws of Chemistry) explains the occurrence of fresh water on coral islands, and confutes the theory of Darwin, that this arises from rain; as rain falling on a substance already fully saturated with sea-water would not be absorbed, but would flow off. Not a doubt of it. But coral islands are not only not saturated, but so much of them as is above the sea-level, three or four feet, is highly porous and perfectly dry, and presents all the conditions for absorbing the whole of the rain that falls on them. They present to the rain this much head of water to push out the sea and expel it piston-wise so far as the coral bed descends,—the sea itself forming the wall of the reservoir. A well dug deep into the coral to draw off the rain-water, with which it is always nearly saturated up to low-water mark, is sure to secure a supply. An illustration of the two not mixing together, if the pores of the soil, rock or coral, be fine enough, may be obtained by making the experiment with capillary tubes.

The red colour with which the sea is tinged round the shores of Ceylon, during a part of the S.W. monsoon, is due to the *Proto-coccus nivalis*, or the Himatta-coccus, which presents different colours at different periods of the year—giving us the seas of milk as well as those of blood. The coloured water at times is to be seen all along the coast north to Kurrachee, and far out, and of a much more intense tint in the Arabian Sea. The frequency of its appearance in the Red Sea has conferred on it its name.

Our author mentions terraces of marine shells embedded in agglutinated sand as prevailing all around the island at a level considerably above highwater mark. The same thing obtains all around the shores of the Mauritius, the Eastern Archipelago, the shores of Hindustan, the Arabian Sea and Red Sea, and, I believe, along the coasts of nearly all the seas in the world. The Reviewer states truly, that “this is an unquestionable evidence of an upheaval—the evidence of subsidence is more difficult to obtain.” He is mistaken. From Cape Comorin to Kurrachee on the one side, and so all around the shores of the Bay of Bengal on the other, multitudes of mangrove roots, their fibres unbroken, and obviously existing where they grew, are found embedded in blue marine clay, from ten to twenty feet below the raised beaches, the surfaces of which, when formed, must themselves have been below half-tide,—as clear an evidence of a previous depression as the beaches are of an upheaval.



I trust I shall not be for a moment supposed inclined to criticize, much less to correct, this admirable and obviously most attractive work. I have taken some texts from it, from which to give some brief discourses on points of natural history which seem of interest, and which, though perfectly familiar to the old Indian, seem scarcely to have reached the English naturalist at all.

GEO. BUIST.

---

London, August 11, 1860.

I have seen in the *Athenæum* of this morning the interesting letter of Dr. Buist, dated Allahabad, June 10, in which exception is taken to a passage in my recently published work on Ceylon, where I have ventured to offer a simpler solution of the phenomenon of the steady supply of fresh water in wells sunk in coral islands, than that heretofore resorted to,—namely, the conjecture that the flow consists of rain-water imbibed from the surface, and banked in by the surrounding pressure of water from the sea. This theory, which was first broached in Admiral FitzRoy's "Voyages of the Adventure and Beagle," and in Darwin's "Naturalist's Journal," is thus propounded in the latter, when speaking of the Keeling Islands, in the Indian Ocean, south west of Sumatra, one of those "atoll" groups, in the islets of which there are wells from which ships obtain water:—"At first sight," says Darwin, "it appears not a little remarkable that the fresh water should regularly ebb and flow with the tides; and it has even been imagined that sand has the power of filtering the salt from the sea-water \* \* The compressed sand, or porous coral rock, is permeated like a sponge with the salt water; but the rain which falls on the surface must sink to the level of the surrounding sea, and must accumulate there, displacing an equal bulk of the salt water. As the water in the lower part of the great sponge-like mass rises and falls with the tides, so will the water near the surface; and this will keep fresh, if the mass be sufficiently compact to prevent much mechanical mixture."—*Darwin's "Naturalist's Journal,"* chap. xx. Dr. Buist's explanation corresponds with that of Darwin; but Darwin, as it will be seen, glances at, although he rejects the theory of filtration from the sea; whilst Dr. Buist urges, that "Nothing is more utterly opposed to the first principles of physics than the doctrine that salt held in solution by water should be capable of being separated from it by the mere mechanical process of filtration." Dr. Buist, however, is not aware that since Darwin wrote, the late Mr. Witt, in a remarkable paper published in the *Philosophical Magazine* for 1856, "On a Peculiar Power possessed by Porous Media of removing Matters from Solution in Water" has made known the results of

experiments carried on by him on behalf of one of the London water-supply Companies, and has shewn that "water containing considerable quantities of saline matter in solution, may, by percolating through great masses of porous strata during long periods, be gradually deprived of its salts, to such an extent as probably to render even salt water fresh." The difficulty which I felt in applying Darwin's ingenious theory to the small coral islands in which fresh water abounds, as well as to wells sunk in the coral formation at the north of Ceylon, arose from the fact, that in the latter, rain falls with such proverbial infrequency as to be inadequate to furnish the supply of fresh water invariably present; whilst in the numerous little coral islands to the west, the area of each is so minute, that their surface, even in the most rainy seasons, could not intercept enough to replenish the wells. Mr. Witt's discovery came opportunely to aid, and facts are recorded in other portions of my book (vol. 1, p. 20; vol. 2, p. 336) besides those which alone Dr. Buist appears to have seen, that in my mind establish the fact that these wells are supplied, not by the banking in of rain by the surrounding salt water, but by the slow percolation of water from the sea through the masses of porous coral.

J. EMERSON TENNENT.



*It is requested that all communications to the Honorary Secretaries may be forwarded to them under cover to the Hon'ble the Colonial Secretary.*

*Specimens for the Society's Museum, or Contributions to the Library, may be forwarded free by Parcel Tappal, or by the Government Steamer "Pearl," addressed in a similar manner.*



**JOURNAL**  
**OF**  
**THE CEYLON [BRANCH**  
**OF THE**  
**ROYAL ASIATIC SOCIETY:**

**EDITED BY**  
**THE SECRETARY,**

---

**1865—6.**

---

**F. FONSEKA, PRINTER, FORT, COLOMBO,**  
**MDCCCLXVI.**



## CONTENTS.

---

	Page.
Proceedings of Meetings ... ..	i.
On Demonology and Witchcraft in Ceylon. By Dandris De Silva Gooneratne Modliar ... ..	1
The First Discourse delivered by Buddha. By the Rev. D. J. Gogerly,	118
Pootoor Well ... ..	123
On the Air Breathing Fish of Ceylon. By Barcroft Boake, B. A., Vice-President, Asiatic Society, Ceylon ... ..	128
On the Origin of the Sinhalese Language. By James D'Alwis, Assis- tant Secretary ... ..	143
A few remarks on the poisonous properties of the Calotropis Gigantea etc. By W. C. Ondaatjie, Esq., Colonial Assistant Surgeon ... ..	157
On the Crocodiles of Ceylon. By Barcroft Boake, B. A., Vice-Presi- dent, Asiatic Society, Ceylon ... ..	160
Native Medicinal Oils ... ..	164



PROCEEDINGS OF MEETINGS  
OF THE  
CEYLON ASIATIC SOCIETY.

---

GENERAL MEETING.

HELD 21st JUNE, 1862.

---

Rev. B. Boake, Vice-President, in the Chair.

The Secretary referred to the arrangement for the transfer of the Military Medical Museum to the Society, which had been completed by the Secretary receiving the Museum keys.

The conditions of the transfer were then read and confirmed; one of these declared that all Military Medical Officers now resident, or who may hereafter reside in Ceylon, be Honorary Members of the Society without entrance fee or subscription.

The following papers were then submitted to the Meeting:—

Descriptive notices of the Raw Products of Ceylon by H. Mead.

The Quassia wood of Ceylon by W. C. Ondaatje.

The Medicinal substances of the Native Bazaars by W. Ferguson.

On the Buddhist Scriptures by J. De Alwis.

Notes on the rain-fall in Colombo during 6 years accompanied by tables and a diagram by J. Capper.

---

*General Meeting, March 7th, 1863.*

Rev. B. Boake, Vice-President, in the Chair.

The Secretary reported the progress made in regard to the increased accommodation required for the Society's Museum in consequence of the amalgamation with it of the Military Medical Museum.



The Governor had approved of the proposed plan for adding a floor to the present building, by which means it would be made to correspond with the opposite wing of the buildings occupied by the Treasury, but there were difficulties in carrying out the plan, owing to the large amount of work on hand in the Civil Engineer's Department. The cost of the building was estimated at £450 and there was no doubt that His Excellency would sanction the appropriation of such a sum. At present the contents of the Military Museum remained in their original rooms which might at any time be required for other purposes.

After reading a list of the books and Periodicals received since the last meeting and the election of new members, the following papers were read.

On the romanization of the Sinhalese Alphabet by R. C. Childers, Esq.

Remarks on the weather during 1862 by J. Maitland, Esq.

Translation of a portion of the Salalhini Sanxao by R. C. Childers, Esq.

*General Meeting, October 31st, 1863.*

Rev. B. Boake, Vice-President, in the Chair.

After the transaction of general business the Secretary reported that the Governor had sanctioned the introduction into the Supply Bill for 1864 of a vote for £513, the estimated cost of enlarging the premises occupied by the Society, in order to enable it to receive the Museum of the Military Medical Department.

Mr. Ondaatje exhibited a specimen of the inspissated juice of the *Alstonia Scholaris*, which he stated to be a substitute for Gutta-percha. It possesses the same properties and is as workable as the latter. It readily softens when plunged into boiling water, is soluble in Turpentine and Chloroform, receives and returns impressions, and is adapted for seals to documents. The tree abounds with milky juice like the Gutta-percha, has a fleshy bark and porous wood, and belongs to the order Apocynæa.

The following papers were then read—

On the air-breathing fishes of Ceylon by Rev. B. Boake.

On Devil Worship by D. De Silva Gooneratne Modliar.

Buddha's First Sermon translated by Rev. D. J. Gogerly, contributed by Rev. R. S. Hardy.

The Origin of the Sinhalese language by James Alwis, Esq.

Buddha's discourse on caste by L. De Zoysa, Esq.

On the poisoning properties of the Calotropis Gigantea by W. C. Ondaatjie, Esq.

*General Meeting, September 3rd, 1864.*

Rev. B. Boake, Vice-President, in the Chair.

The Secretary made a brief statement in reference to the position of the Society and the arrangements in regard to the Museum.

Last year Sir C. MacCarthy promised a public grant for the purpose of enlarging the Society's rooms, to enable it to receive the collection presented by the Military Medical Department. On the faith of this promise the Society paid to the Medical Department from its limited funds about £502, being the value of the cases and stands containing the collection. A vote of £513 was placed in the Supply Bill for 1864 for enlarging the premises, but was afterwards withdrawn. This year the Committee applied to Government for £100 to enable it to receive a portion of the Military Museum within the existing premises, to which request the Government replied that there were no funds at its disposal, and the vote could not be entertained in the Supplementary Supply Bill for this year. The balance of the Society's funds in the hands of the Treasurer was only £15, it was therefore impossible to go on with the printing of the Journal.

The following gentlemen were elected members of the Society:—

Messrs. R. Tatham, J. Winzer, C. Ferdinand, J. Martensz, W. H. Harrison, R. Jones.

The following new rules was proposed and adopted:—

“That members returning from Europe be allowed to rejoin without any further payment than the current subscription.”

Papers were then read—On the origin of the Sinhalese language, Part II. by J. De Alwis, Esq.

On Taxidermy by W. H. Harrison, Esq.

Papers relating to the surrender of the Dutch Forts to the British from the Dutch records by Mr. W. Gonetilleke.

*General Meeting, Saturday, May 13th, 1865.*

The Rev. B. Boake, Vice-President, in the Chair.

The Secretary read a report setting forth the absence of any fresh papers for reading, and the state of the Society's funds. The Governor had declined to give the sum of £50 in addition to withholding the vote for adding to the accommodation of the building to enable it to receive the articles from the Military Medical Museum.

Subscriptions for the current year had not been collected, as it was not clear that it was desirable to ask for them, as no business had been transacted.

At the conclusion of the report Mr. Capper expressed his wish to resign the Office of Secretary, it was resolved accordingly, that Mr. Steward be appointed Secretary, and that the thanks of the Society be given to Mr. Capper for his services during the long time he had acted as Secretary. It was also resolved "that a deputation should wait upon the Governor shortly after his arrival in Colombo, to request His Excellency to become the Patron of the Society, and at the same time to urge its claims to a small grant from the Public funds, and that the deputation should consist of Sir Edward Creasy, Mr. Layard, Mr. Wall, Mr. Lorensz, Mr. Capper and the Secretary."

*General Meeting, November 2nd, 1865.*

*Present:—*The Chief Justice Sir Edward Creasy, in the Chair.

The Hon'ble Mr. Justice Temple, Rev. B. Boake, Rev. J. Nicholson, Messrs. J. A. Caley, C. A. Lorensz, R. Dawson, J. P. Green, W. C. Ondaatjie, W. Ferguson, L. De Zoysa, G. S. Steward.

The following gentlemen were proposed and elected Members of the Society.

The Rev. J. S. Mill, S. T. Richmond, Esq., George Hawkins, Esq., Hugh Nevill, Esq., A. Primrose, Esq., Mr. Holdsworth was also proposed and elected an Honorary Member,

The following motions were then proposed and carried:—

1st. Proposed by Dr. Fraser, seconded by Mr. Lorensz, that the Chief Justice, the Bishop, and the Hon'ble Mr. Justice Temple be requested to become Vice-Patrons of the Society.

2nd. Proposed by the Hon'ble Mr. Justice Temple, seconded by J. A. Caley, Esq.

That the Committee do consist of the following gentlemen:—

*President.*

Dr. Fraser.

*Vice-President.*

The Rev. Barcroft Boake.

*Treasurer.*

S. Rains, Esq.

*Conservator.*

G. Hawkins, Esq.

*Secretary and Librarian.*

G. S. Steward, Esq.

C. P. Layard, Esq., Major Skinner, C. A. Lorensz, Esq., A. M. Ferguson, Esq., R. Dawson, Esq., K. Jones, Esq., J. De Alwis, Esq.

3rd. Proposed by Mr. Dawson, seconded by Mr. Green, that the Librarian be requested to ascertain by an examination of the books in the library, what books have been mislaid.

4th. Proposed by Major Skinner, seconded by Mr. Dawson.

That in future any member, who wishes to obtain the loan of a book, shall make application in writing for it to the Librarian, who shall file the application and make a record both of the issue and the return of the books.

5th. Proposed by Mr. Nicholson seconded by Mr. Ferguson, that the conservator be requested to compare the specimens in the

Museum with the list given in the Appendix to the 6th Report, and report the result of the enquiry to the Committee.

Mr. Lorensz stated that he had a sum of £60 in the bank in his name as Treasurer of a Society which once existed here called the Athenæum, and said that he thought it might be made use of by the Society for the purpose of bringing out the Journal. Some conversation was carried on as to the legality of this, and it was determined that Mr. Lorensz should write to all the share holders, whose addresses he could discover, to ask their permission to appropriate their funds to the purpose mentioned.

*Committee Meeting, November 18th, 1865.*

*Present:*—Dr. Fraser, Rev. B. Boake, C. P. Layard, Esq., G. Hawkins, Esq., G. S. Steward, Esq.

The question of the appointment of a Librarian at the last General Meeting was discussed and it was determined that the Secretary should see Mr. De Zoysa and ask him if he would be willing to act as joint Librarian with the Secretary, and that a General Meeting should be called as soon as possible to settle the difficulty.

The following additions to the Library were laid on the table:—

Answers from Government Agents of Galle, Jaffna and Matura, to questions addressed to them on the Natural History of their Provinces.

Proceedings of the Asiatic Society of Bengal for May, June and July, 1865.

3 Nos. Journal of Asiatic Society of Bengal Part I. No. 1. Part II. Nos. 1 and 2.

General report of Public Instruction in the Lower Provinces of the Bengal Presidency for 1863 and 1864.

Journal of the Royal Asiatic Society of Great Britain and Ireland 1865 Vol. I. Part II.

5 Nos. Annals of the Magazine of Natural History.

Sacred Books of the Buddhists compared with History and Modern Science, presented by Rev. R. S. Hardy.

The Secretary was directed to write and thank Mr. Hardy for his donation.

---

*General Meeting, December 1st, 1865.*

*Present:*—Rev. B. Boake, in the Chair.

Rev. J. Nicholson, Messrs. H. Nevill, L. De Zoysa, A. M. Ferguson, W. Ferguson, G. Hawkins, J. S. Mill, C. A. Lorensz, R. Dawson, A. Primrose, G. S. Steward.

Mr. Boake reported that he had received a letter from Sir Edward Creasy saying that His Excellency the Governor had consented to become the Patron of the Society.

The question of the late appointment of a Librarian was then discussed and it was agreed that Mr. De Zoysa should be asked to act as sole Librarian, which he consented to do.

Mr. W. Ferguson, Mr. J. A. Caley were added to the Committee.

It was determined that subscriptions should be considered due in January of each year, and that members who have not paid by the end of the year shall be considered to have relinquished their connection with the Society.

Mr. De Zoysa presented a copy of a Dictionary of the Pali language by Mogallana Thero with English and Sinhalese notes by Waskaduwe Subkati, Buddhist Priest.

---

*Committee Meeting, December 9th, 1865.*

*Present:*—Rev. B. Boake, in the Chair.

Messrs. L. De Zoysa, R. Dawson, G. S. Steward.

The following papers were laid on the table by the Secretary:—

1 Engineers Journal.

2 Nos. Journal of the Asiatic Society of Bengal Part I. No. 3 Part II. No. 3.

1 Vol. Proceedings of Asiatic Society of Bengal for September, 1865.

1 No. Annals of Magazine of Natural History.

The Secretary read a letter from the Treasurer regretting that he was not able to attend the meeting, and sending a report of the state of the Society's funds.

It was settled that Mr. Dawson and Mr. W. Ferguson should be asked to audit the accounts and prepare a report by the next Committee meeting.

---

*General Meeting, February 23rd, 1866.*

*Present:*—Rev. B. Boake, in the Chair.

Rev. J. S. Mill, Messrs. C. P. Layard, W. Ferguson, A. Primrose, R. Dawson, L. De Zoysa, J. A. Caley, G. S. Steward.

The following gentlemen were elected members of the Society:—

T. C. Bury, Esq., Rev. Brooke Bailey.

C. M. P. Pieris, Esq., A. Karunaratna, Esq., Cornelius Jayasinghe, Esq., Rev. J. MacArthur, S. Grenier, Esq., J. R. Blake, Esq.

It was proposed by Mr. Dawson, and seconded by Mr. Ferguson that the sum to be paid for life membership should be 10 guineas at entrance, 8 guineas after paying subscription for two years, and 7 guineas after four or more years' subscription.

Mr. Primrose was appointed Treasurer in place of Mr. Rains, who had expressed his wish to resign.

It was determined that the Committee should meet as soon as possible and make arrangements for publishing the Journal.

---

*Committee Meeting, March 16th, 1866.*

*Present:*—Rev. B. Boake, in the Chair.

Messrs. L. De Zoysa, A. Primrose, G. S. Steward.

The following gentlemen were appointed a reading Committee to report upon the papers:—

Rev. B. Boake, Messrs. L. De Zoysa, A. Primrose, R. Dawson, Mutu Coomara Swamy, J. De Alwis.

*Committee Meeting, July 6th, 1866.*

*Present:*—Rev. B. Boake, in the Chair.

Messrs. R. Dawson, L. De Zoysa, G. Hawkins, G. S. Steward.

The following books were laid on the table.

Engineer's Journal for January, February, March, April, May 1866.

Proceedings of Asiatic Society of Bengal for December, 1865 with Index for the year.

Journal of Asiatic Society of Bengal Part II. No. 1, 1865.

Military Sanitary Report.

Poetical version of Genesis and Exodus in Tamil by Rev. J. Mc Arthur, Jaffna, presented by the Author.

Journal of Bombay Asiatic Society 1861-62 1862-63.

3 Nos. Annals of Magazine of Natural History.

2 Photographs from Mr. Macready from Putlam.

Proceedings of Academy of Natural Sciences of Philadelphia for 1865.

A sum of £5 was put at the disposal of the Secretary for repairs.

£10 were voted for procuring things from England necessary for setting up specimens in the Museum.

It was agreed that the following papers should be published.

All the Chapters of Mr. Silva's Work on Demonology in Ceylon except chapter VIII.

Origin of the Sinhalese language by J. De Alwis, Esq.

1st discourse of Buddha.

A few remarks on the poisonous properties of Calotropis Gigantea by Dr. Ondaatjie.

A paper on fish by Revd. B. Boake.

A paper on Medicinal oils.



*LIST of Members of the Ceylon Branch of the Royal Asiatic Society.*

Alwis, J. A.	Marsh, J.
Alwis, A.	Morgan, Hon'ble R. F. W.
Boake, Rev. B.	Merson, Rev. C.
Birch, F. W.	Martensz, J.
Bailey, Rev. J. B.	Mill, Rev. J.
Bury, F. C.	Mc Arthur, Rev. J.
Blake, J. B.	Nicholson, Rev. J.
Caley, J. A.	Nevill, Hugh.
Capper, J.	Ondaatjie, W. C.
Coomara Swamy, M.	Pole, H.
Creasy, Hon'ble Sir E.	Primrose, A.
Dawson, R.	Pieris, J. M. P.
Dickson, J. F.	Richmond, S. T.
Dias, C.	Shultze, N. D.
Ferguson, A. M.	Skeen, W.
Ferguson, W.	Stewart, C. H.
Flanderka, J. L.	Skinner, Major, A.
Ferdinands, C.	Steward, G. S.
Gibson, Hon'ble W. C.	Saram, F. J. De,
Green, J. P.	Thurstan, Rev. J.
Grenier, S.	Tatham, Ralph.
Hawkins, G. H.	Temple, E.
Jones, Kepple.	Wall, G.
Jayasinghe, Cornelis.	Winzer, J.
Karunaratna, M.	Young, Rev. J.
Lorensz, C. A.	Zoyza, L. De
Layard, C. P.	

*ACCOUNT of the state of the Society's funds  
by the Treasurer.*

---

			£	s.	d.
Balance received	-	-	25	13	8
1 Life subscription	-	-	7	7	0
Entrance fees	-	-	5	15	6
Subscriptions paid	-	-	29	8	0
Journals sold	-	-	0	10	0
Amount from Athenæum Society paid over by Mr. Lorensz	-	-	66	7	10
			<hr/>	<hr/>	<hr/>
			135	2	0
Paper for Printing Journal	-	-	15	0	0
Paid on account to Printer	-	-	3	10	0
Notices	-	-	0	15	0
Vote to Secretary for repairs	-	-	5	0	0
Advertising	-	-	0	2	4
Collecting subscriptions	-	-	1	17	6
Peon's wages	-	-	11	15	6
			<hr/>	<hr/>	<hr/>
			38	0	4
Balance in hand	-	-	97	1	8

---



JOURNAL  
OF  
THE CEYLON BRANCH  
OF THE  
ROYAL ASIATIC SOCIETY.

---

*On Demonology and Witchcraft in Ceylon.—By* DANDRIS DE  
SILVA GOONERATNE, MODLIAR.

---

GENERAL REMARKS ON DEMON WORSHIP.

A belief in the realities of an invisible world of evil spirits as influencing, in a certain manner, many of the ordinary concerns of human life, has not only always formed an integral part of the creed of a large majority of mankind in every age and country of the world, but has also had, and still has, to a considerable extent, a certain strange, mysterious, and unaccountable fascination for the mind of man, even when reason happens to raise its authoritative voice of condemnation against it. Why, or how this is so—whether it is founded on any innate, morbid quality of the human heart, which men find it difficult to resist under certain circumstances, or on any intrinsic truth inherent in the nature of the thing itself, or only on mere ignorance, it is as far from my present purpose, as it is beyond my humble abilities, to discuss here. But that the belief really exists will hardly admit of a doubt.

This belief has, according to the amount of intelligence and civilization possessed by those among whom it prevails, given rise to various systems of superstition, of which some are of the most

debasing and revolting character. And although there is scarcely a single country in the world, in which this belief does not more or less prevail in some form or other, yet we do not think there is any, in which it has developed itself in such gigantic proportions, or such hideous forms, as in this beautiful Island. Elsewhere it may sometimes exercise considerable influence and even command many devoted votaries; but here it has been moulded into a regular *religion*, arranged and methodized into a system, and carefully preserved in writing: so that the amount of influence, which it exercises over the thoughts, the habits, the every day life of a Singhalese, is such as can hardly be believed by a stranger to the character of a genuine Singhalese Buddhist.

A series of writers commencing with Knox and ending with Sir Emerson Tennent, have, at different periods, during the last 200 years, given to the public the results of their enquiries and experience in matters connected with this Island, in a number of interesting and able works of which Sir Emerson's is the last and the greatest: yet none of these writers seem to have perceived, in any *adequate* degree, the extraordinary amount of gross superstition which prevails among the people, of whose manners, customs, and history they professed to treat; not that they have omitted to mention the worship of gods and demons, as well as Buddhism and a few other superstition, as existing among our countrymen, and even in some instances, gone into considerable details *respecting them*, but they do not appear to have been fully aware of the extraordinary degree of influence they exercise over the mind of a Singhalese. This is owing partly to the circumstance of these writers being Englishmen, mostly unacquainted with the native languages, and partly to a certain reluctance, which a demon-worshipper always feels, to communicate full and unreserved information to a stranger who professes a different religion, suspecting that the object of the Englishman, in seeking for information respecting a system in which he himself does not believe, is only to publish it in his books and newspapers, and thereby expose it to public ridicule.

In the following pages, we propose to class the different forms of superstition prevailing among our countrymen, under the following heads, viz:—I. **DEMONISM**, or the worship of demons or evil spirits; II. **CAPUISM**, or the worship of gods, demigods, and deified heroes; III. **GRAHAISM**, or the worship of planets and stars; IV. **MISCELLANEOUS SUPERSTITIONS**, or such as cannot properly be classed under any of the preceding heads. Not only will each of these be found to be distinct from the rest in all material points, but they also appear to have originated in the Island at different periods of time.

It is not easy, however, to fix definitely any particular period of time as that in which any of these systems of superstition *first* originated in the Island, no positive information of a very reliable character being supplied by any records of native annals now extant. Nevertheless the most reasonable supposition, and one which is supported by all who have touched upon the subject, and, to a certain extent, by the native historical records themselves, is, that the greater portion of them existed here at a very early period, long anterior to the commencement of the Christian era.

With the exception of Buddhism (also which is partly, though in some few respects only, based upon Brahminism) every species of superstition, science, or literature, which exists among the Singhalese, with certain exceptions of minor importance, may be traced, more or less directly to Brahminism and its Vedas and Shasters. Whether this is solely a consequence of Wijeyo's invasion (543 B. C.), or whether any portion of them, such as the worship of demons and of planets, had existed here even before that event, and only became assimilated to the Brahminical doctrines itself in subsequent times, it is not easy to decide; but yet, if the wild, ignorant savages, who inhabited this Island, when Wijeyo landed on it, and whom Native Chroniclers have styled *demons*, did profess any form of worship, as no doubt they must have done, it is more likely that it related to demons and planets, than to anything else. Men steeped in complete barbarism and ignorance, separated by their insular position from the rest of the world, attributing, with

the first impulse of uneducated nature, a supernatural agency to natural causes and events, when these were beyond the comprehension of their simple intellects, and naturally impelled, therefore, in the absence of any other form of religion calculated to fill up the void in their minds, to embrace any which their untutored passions and feelings, and their immediate wants and conveniences suggested to them, as the best—men such as these are likely to coin for themselves a religion, which in every respect corresponds with their own dispositions. Sickness and death, the most direful calamities of life, with the many dreadful circumstances generally attending them, are, of all causes, those which would naturally, in those early ages of the world, excite, in an ignorant and simple mind, feelings of supernatural terror; and the rise, among such a people, of a system of worship, in which every form of disease and suffering is attributed to the agency of demons, must cease to excite wonder in any mind. If Demonism did actually exist here previous to the invasion of Wijeyo, as we think it did, a multitude of other causes and circumstances, which followed that event, as consequences of it, must have cooperated to bring it into its present condition, with its charms and spells and invocations to the Hindoo deities. These changes appear to have been going on till within the last 3 centuries.

But though we are not able to fix the exact period at which Demonism originated in the Island, we have enough of evidence to prove, that its origin could not have been later than the fifth century; for the seventh Chapter of *Maha Wanse*, a work whose authenticity has never been called in question, makes mention of *Balli*\* offerings, made to demons at the time of Wijeyo, that is five and a half centuries before the Christian Era; which shews, that, even if Demon-worship did not prevail here in the days of Wijeyo, it did so

---

\* Although the books of the demon priests direct that a *balli* or image of any demon invoked on any occasion, should be formed, and offerings be made to it, yet in point of practice this image, or *balli*, has generally been dispensed with in modern times.

There is another species of *balli* made to represent, not demons, but *Planet gods*. These will come to be noticed under the head *Grahaism*.

in the days of Maha Nama Terunnanse, who was engaged in the composition of that historical work, between the years 459 and 477 A. D., that is nearly 1400 years ago.

Grahaism may, with equal reason, be supposed to have been a system of still more ancient origin; the sun, moon, and stars being the first objects of wonder, which are calculated to rouse, in an ignorant mind, feelings of superstitious adoration. But, as it at present exists, it appears to be almost wholly an emanation from Brahminism. While Capuism, on the other hand, is a mixture of Hindooism and of a more refined species of Demonism, the first derived from the continent, the latter of indigenous growth, and both mixed together into a heterogeneous system, originating probably at a period later than the two former.

Although Buddha is said to have visited Ceylon three several times before its conquest by Wijeyo, his religion was not established in it till the reign of Dewanan Piatisse, who ascended the throne 307 B. C., nearly 236 years after Buddha's death. But, from the first day of its introduction into the Island, its success seems to have been very rapid; and indeed from the despotic nature of the government, and the religious enthusiasm of the king, assisted as it was by the proselytizing spirit of Dharma Soka of India (the grandson of him who has been called *Sandracotta* by the Greek writers) its success could not but have been certain, immediate, and complete. But demonism was not displaced by it. It only took a subordinate rank. Buddhism acknowledges the existence of demons, and connives at, if it does not openly countenance, the practice of demon-worship, or at least of a great deal which belongs to it. Buddhism does not hold out worldly advantages or immediate rewards in this life to its votaries, so much as demonism does. Its task is the graver one, of pointing out a way (though an erroneous one) of obtaining salvation for the soul; an object which is to be attained, only after passing through many transmigrations of the soul, through countless millions of years—a consummation, therefore which, however devoutly wished for by a Buddhist, is still one to be attained only in another state of existence, at some



unknown distant period of time. Demonism, on the other hand, deals with the concerns of this life, and of this life alone. This, therefore, appeals more strongly to the passions and feelings, in as much as it relates to things nearer, and present. Hence, demonism never lost its hold on men's minds, but, on the contrary, it still continues to be the most popular of all forms of worship prevailing among the Singhalese.

The period, at which demonism seems to have been fashioned into the form it still retains, is that which intervened between the eleventh and the sixteenth centuries, during which, owing to the numerous wars which were incessantly waged between the princes of this Island and those of Southern India, thousands of Malabars often became residents, as captive slaves or as freemen, among the Singhalese, and imparted to the latter, many of their own peculiar superstitions and notions, so that many fresh additions were made to demonism, both in the number of demons, and, especially, in the introduction of a large number of charms or spells recited at every demon ceremony now; so much, indeed, does this appear to have been the case that more than seven-eighths of the charms, belonging to Singhalese Necromancy, are in the Tamil language; a circumstance which has led many to believe, that demonism is altogether an importation from the continent. During the last three centuries, no changes whatever seem to have been made in it, or if any, only of a very trifling nature, and that too, more in the gradual alterations of the language used in the invocations, than in any thing else. Knox's short account of the form of demon-worship, which prevailed at the time he was a captive in this Island, that is 200 years ago, seems, judging even from the little he has said on the subject, to be exactly the form of worship, which at this day prevails among the people.

Thus, besides Buddhism, properly so called, there are three other forms of worship, which enter into the religious creed of a Singhalese, namely Demonism, Capuism, and Grahaism. In addition to these, there are also a variety of other minor superstitions, considered to be quite necessary to his welfare, and which, though of minor

importance, do engage, and will continue to engage, his serious attention, so long as he continues to be a Buddhist. As the first of these, viz., Buddhism, relates only to his spiritual interests, affecting him in another life, so the last three concern his temporal interests in this life; the fruits of the first being tasted only in another state of existence, while those of the last are enjoyed immediately and during every moment of this life. To which of these therefore a Singhalese resorts oftenest, and with the greatest eagerness, it is easy to imagine. He has one religion for his soul, and another for his body, both highly revered, and maintained as essential to his well being; a convenience which, as far as we are aware, no other nation in the world possesses.

The most remarkable feature in the character of a Singhalese is, not that he is a follower of any one of these superstitious systems, but that he is a follower of each and all of them at one and the same time; for the doctrines of some of these appear to be contradictory to, and inconsistent with, each other. For instance, Grahaism maintains, that the movements of the Planets influence man in every thing; that sometimes they bring disease, death, poverty and every other imaginable misery, not only on himself, but sometimes even on those connected with him; that at other times they give him health, wealth, honours, happiness, and every thing else desirable; but that all the aforesaid calamities may be prevented by propitiating the planets by certain ceremonies. On the other hand, the fundamental doctrine of the religion of Buddha, being, that every man is what he is, owing to *Karma*, that is, to the nature of what he has done, good or bad, in a previous state of existence, Buddhism, or at least every Buddhist Priest admits, in a spirit of compromise, as it were, that many of the calamities or turns of good fortune, which befall men, do take place according to the movements of the planets, but contend, that these movements are not arbitrary and optional with the planets themselves; that they are the result of a certain fixed order according to which the planets must move; that the planets are only a sort of intermediate agents, serving merely as blind instruments in the hands of *Karma*, to prefigure to the

world the various changes of fortune, which must come upon each man according to his *Karma*, that is, according to his good or bad deeds in a former life; and that no propitiation of the planets, or of any power whatsoever, in the whole universe, can ward off calamities, or hinder happiness and prosperity, deserved by a man on account of this inexorable Karma. Nevertheless, a Singhalese contrives to believe in all the four systems, and to be, at the same time, recognized as an orthodox Buddhist; and it would be a rare thing to meet with any one, who, in point of practice, is a votary of only one or two of the systems. The influence which these systems command, notwithstanding such inconsistencies as the above, may be judged of from the fact, that the Buddhist Priest himself, the very teacher and expounder of the religion of Buddha, has sometimes recourse to Grahaism and even to Demonism. Before we proceed further, we shall make a few more general remarks on each of these systems.

I. DEMONISM is regarded as a means of guarding against sickness, and of curing it when it is supposed, as it almost always is, to be caused by a demon, and also as a means, in the hands of any man, of inflicting death, disease, or other calamity, on other men. A subordinate object of it is the accomplishment of purposes different from the above, such as that of protecting the fruits of a tree from pillage, of creating discord and hatred between the different members of a family, of gaining the affections of a woman, of discovering treasures hidden in the ground, and other similar purposes. The demons are regarded as beings only influenced by the worst of motives towards mankind, without a sentiment of pity, justice, or kindness, in their nature. They are made instrumental in curing diseases, as well as in inflicting them. They are to be coerced by spells, and propitiated with offerings and particular ceremonies. They cannot affect the spiritual welfare of a man in any way; but can only cause death at the most. A Singhalese demon, therefore, is a different kind of being from the demon of European superstitions or from the Diabolus of the New Testament. For, while the object of the latter is to ruin for ever the soul of a man, that of the

former is only to injure the body. A Singhalese demon is himself a being subject to death, like all other beings recognised by Buddhism, although that event may in some instances take place only at the end of some tens of thousands of years. This difference arises from the Buddhist doctrine, that there is no state of perpetual existence for any being; that happiness or misery can never be perpetual; that the rewards or punishments for the actions of one life will be reaped in one or more states of existence afterwards, and then come to an end; and that mere obedience to a demon does not necessitate any disobedience to one's religion.

In every other form of worship, which exists among men, whether it be Buddhism, Capuism, Mohammedanism, Brahminism, or any other, the objects of worship are always regarded with feelings of veneration by their votaries; but in Demonism alone, no such feelings exist in the heart of the worshipper, whose worship consists only in trying to induce them by flattery, and offerings, or to coerce them by threats, to cure, or to inflict some disease, or to secure a man from becoming liable to it at all. And yet neither the rites of Buddhism, nor of Capuism, nor even of Grahism, are more frequently and eagerly resorted to, than those belonging to the worship of demons, who, instead of being objects of religious veneration, are only objects of indescribable dread.

One of the main differences between an educated and an uneducated intellect seems to be this—that, while the former always aims at analysis, at generalization, at resolving the mysterious and the marvellous into natural causes, at laying open the hidden and inscrutable things of nature, the latter takes the directly opposite course of indulging in the unreasonable and unaccountable pleasure of throwing a veil of mystery and darkness even over those things, which, if it were to view them rationally, it might understand, and of endeavouring, as often as possible, to give “a local habitation and a name” to what has neither. Nowhere is this strange peculiarity of the uncultivated intellect perceived in a more tangible form than in the demonology of the Singhalese.

As may naturally be expected in such a system, created and

upheld merely by popular superstition, we find that not only are many of its tenets sometimes contrary to each other, but that the Cattadiyas (demon priests) and even the very books, which lay down the principles of their system, often differ from each other, so much so, indeed, that it is very difficult for any one, undertaking to give a connected and consistent account of the Demonism of Ceylon, to avoid sometimes making in one part of his account a statement inconsistent with another in another part of it. But as far as the Cattadiyas and their followers are themselves concerned, such difficulties are easily surmounted, by their attributing all such contradictions, if pointed out, to the mysteries of the art, and to their own ignorance, rather than to any fault of the system itself.

The Priests of Demonism are styled Yakaduras, Yakdessas, or more commonly, *Cattadiyas*; and there is scarcely a single village in the Island, which does not boast of at least one. Nearly twelve months are spent in learning the trade, the most laborious and principal part of the task of a beginner being, to commit to memory the charms, invocations, and songs, which are essential to his vocation. What the number of these is, may be estimated from the fact, that some of the demon-ceremonies commence at 6 or 7 P. M. and, lasting without intermission throughout the whole night, close only about 6 or 7, and sometimes later, the next morning; during all which time the performer has to repeat from memory all his charms and songs, only now and then interrupted by a violent bout of dancing. The dancing and the singing generally go on together, except when the former happens to be of so violent a nature, as to render it impossible to continue the other along with it. The profession was in early times exclusively confined to the low Castes, such as Tomtom Beaters, Durayas, and Jaggeries, but at present there is no such exclusiveness, men of every caste betaking themselves to it. The first man who ever practised the art, is said to have been one *Pradeys Rosia*.

A Cattadiya, who is a priest, though it be of demons, is yet never looked upon as in any way distinguished from the rest of the people by any supposed sanctity of character, or by a superior degree of

intelligence; he wears no particular badge or dress like the Buddhist Priest, and receives no particular respect from any one ;—his ordinary life and avocations are like those of his neighbours; and as the members of his fraternity in the same village sometimes amount to three or four, his professional income does not suffice for his maintenance. He is therefore obliged to betake himself to some other supplementary business to increase his income. His profession is looked upon only as any ordinary calling, and commands no more respect than that of a boatman, a boutique keeper, a toddy drawer, or any other common trade. There is nothing of a sacred character belonging to it, as to that of the Buddhist Priests.

II. CAPUISM, like Demonism, also refers to the interests of this world; but while the object of the latter is to inflict or cure diseases by the agency of demons, the object of the former is to protect men generally against all manner of evil, and from diseases of a particular kind, such as small pox, chicken pox, and any epidemical disease of a malignant nature, and more especially to render prosperous the various avocations and trades of the people. The *dewiye* or gods, who are the objects of worship in Capuism, are a more exalted class of beings, not possessed of the same evil dispositions as the demons, nor bringing like them sickness and death on innocent people; but reserving their powers of doing evil only for the punishment of those, who in any way displease them. But the punishment they inflict is always out of proportion to the nature of the offence. Although not so malignant as the demons, they are yet revengeful and irascible in their nature. They are more properly called *dewatawo* or inferior gods, and are propitiated by particular ceremonies. The priests of this worship are called *Capuas*. The priestesses of one of the principal goddesses belonging to this worship, named *Pattiny deviyo*, are called *Pattiny Hamies*. These *Pattiny Hamies* are not always females, males very often assuming the office. Both *Pattiny Hamies* and *Capuas* hold nearly the same rank in the estimation of their countrymen, and lead the same sort of life, as the *Cattadiyas* already mentioned; but in earlier days they were considered to be superior to the *Cattadiyas*, and in the inland

districts of the Island they still retain this superiority to some extent. The sacred character however assigned to the Priests of Buddha is wholly denied both to the Capuas and to the Cattadiyas.

III. GRAHAISM, as it exists here at the present day, owes its origin to Judicial Astrology. The Horoscope of a man is an essential thing for determining both the nature of the planetary influence, which troubles him at any particular time with disease or some other evil, and also the nature of the particular ceremony necessary to remedy the evil. The calculations of the Astrologer shew that a certain position or a certain movement of the planets, or their arrival at a certain point of their orbit, is fraught with some calamity or some advantage to a man. When the former happens to be the case, the planet god, who is the cause of the evil, is propitiated by certain ceremonies called *Balli* ceremonies. These, being of various kinds, will come to be treated of in detail in a subsequent chapter. These *Balli* ceremonies have become more generally diffused through the Island since the reign of Sree Prakkrama Bahoo VI., who commenced his reign at Cottah in the year 1410, A. D. Before that time they were confined generally to the magnates of the land. When a king or a rich aristocrat fell sick, Brahmins and others skilled in the art were sent for from India, who sometimes also came of their own accord, and gave the benefit of their services only to those, who were able to pay them well: but Sreerahola Terunnanse, a Buddhist priest who lived during that reign, and who is reputed to have been the most learned man of his time in the Island, reduced Grahaism to its present condition, by teaching it to people of some of the low castes, and thereby rendering its benefits available to all classes of people. And so to this day, although every class of Singhalese engages in the worship, yet the office of priest or *Ballicaareya* or *Ballendura* is still held only by some of the low caste people, especially the *Berawayos* or Tomtom beaters.

---

## CHAPTER II.

## THE DEMONS OR YAKSEYO.

The Demons or Yakseyo\* are a class of beings forming a large community, under a government conducted by a King, and subject to laws enacted by him for their control, any infringement of which is followed by severe punishment. Wessamunny, this dreaded king, whose subjects throng every part of the sky, carries in his hand a sword of gold, of such wondrous power, that, when he is displeased with any of his subjects, it flies out of his hand of its own accord, and, after cutting off the heads of a thousand offenders with the rapidity of lightning, returns to his hand again. His laws are such as become the character of his subjects,—cruel, severe, and merciless, death being the rule, and any lighter penalty the exception in the punishment of any crime—burning, boiling, roasting, broiling, impaling, flaying alive, pouring melted metal down the

---

\* Sir Emerson Tennent in his *Christianity in Ceylon* distinguishes *Yakseyos* from *Yakkas*, and describes the former as a gentle and benevolent race of beings, and the latter as malignant spirits; whereas, the truth is that both the terms, the former being the Sanscrit, and the latter the Singhalese word, mean the same thing. There are several other names by which these beings are known such as *Yakkha* (Pali), and *Yaksaya* (a Singhalese form of the Sanscrit term). The benevolent and gentle character, attributed by Sir Emerson, is true only of a portion of those Yakseyo mentioned in the Pali Buddhistical Works. But the malignant Yakseyo, who cause disease and suffering among men, are those who are worshipped in Demonism. These latter are not mentioned in the Buddhistical works, and are the indigenous demons of Ceylon, being creations of the popular fancy, existing in the belief of the Singhalese from a period perhaps long anterior to the introduction of Buddhism into the Island.

The *Rakseyo* are a race of beings, who differ from men only in being cannibals. They live solely on human flesh, which they obtain, not from graveyards or other places where human carcasses may be had, but by actually seizing and killing living men. They have no supernatural powers whatever like the Yakseyo. This notion about Rakseyo supports the idea that in the earliest periods of time this Island must have been inhabited by a race of men, who breakfasted on their fellowmen, like the inhabitants of some of the Polynesian Islands.



throat, driving sharp nails into the crown of the head, and a variety of other punishments, numbering 32 in all, distinguish his penal code. He has viceroys, ministers, and other officers necessary for the proper administration of his government. Between His Majesty and the mass of his subjects, there is a series of chiefs in regular gradation to each other, each of whom within his own allotted sphere of action exercises almost an unlimited amount of power. He exacts from all his subjects a degree of servile obedience to his will, which not the most despotic of earthly sovereigns ever pretended to claim; and the mere mention of his name is sufficient to make any of his subjects tremble with fear. His subjects spend their time almost always in amusing diversions of various kinds. Many of them at one time were so little under his rule that they openly attacked men, and either devoured them alive bones and all, or sucked their blood. Every Saturday and Wednesday, all the respectable demons attend a sort of pandemonium called *Yaksa Sabawa*, where each chieftain gives an account of the conduct of those under him to the principal chiefs; after which, they all engage in dancing, singing, playing on musical instruments, and in the display of exploits of skill and dexterity.

Demons are of two classes, those approaching to the nature of gods, wise, powerful, and not merciless, living in the upper regions of the sky, in magnificent palaces decorated with gold, silver, and precious stones, enjoying an amount of happiness little inferior to that of the gods themselves, and sometimes called *dewatawas*; and those, who with wild, savage, gross, beastly natures, pass their time near the surface of the earth, revelling in scenes of blood and misery, bringing disease and death on men, and receiving offerings of rice, meat, and blood, in return. The former class of demons are those mentioned in the Pali works, and do not belong to Demon-worship, but the latter, being those who are supposed to afflict men, are the objects of dread and of worship among the Singhalese.\* These

---

\* That none of the demons mentioned in the Buddhistical writings should be found to be objects of worship among the Singhalese, and that Demonism

are supposed to be the most terrible and hideous looking creatures in existence. Their aliment is blood and flesh, especially of human beings, but this not being allowed them now by their king, they are obliged to content themselves with making men sick, and accepting the offerings made by the sick people, which in imagination they suppose to be the flesh and blood of men, but do not, or cannot, actually eat; the only use they make of such offerings being to look at them, and enjoy the pleasure the sight affords them. By what other means they support existence, whether they take any kind of food whatever, or live by some supernatural means without the use of any food, neither the Cattadiya nor his books enable us to say.

They are said to have, in general, skins of a black colour, and large protruding eyes and hanging lips, with long white teeth, of which those called the canine, in some demons, project out of the mouth, curved like a pair of sickles. They sometimes wear about their persons venomous serpents, especially Cobras. They are invisible to men, but have the power of making themselves visible, generally in some other shape, often in that of beasts, of men or of women. As the favorite food of the cat is said to be rats, and that of tigers

---

recognizes demons wholly unknown to Buddhistical literature, do in themselves constitute a strong piece of internal evidence in proof of the greater antiquity of Demonism over Buddhism in this Island. For, had the latter been the one earlier established here, the probability, amounting almost to a certainty, is that the demons recognised by Buddhism itself would have been the demons who would have become objects of worship.

If Buddha and Wessamonny are mentioned in the invocations and charms of Demonism, as they often are, it only shews the natural result of two systems, which have continued to flourish together side by side for 2000 years and upwards, trying to adjust themselves to each other as much as possible: the more so when the believer in one system happens, as is the case here, to be also a believer in the other. Buddhism being considered to be the *sacred* religion, while Demonism is only a religion relating to one's temporal interests, it is natural that the influence of the former should to a certain extent be felt on the latter.

black cattle, so the favorite dish of a demon is said to be a living man. And because he is not allowed now to indulge himself in that luxury, he therefore takes pleasure in throwing his influence on men in a certain mysterious manner, which, it is said, is a source of enjoyment to him, as if he were actually engaged in sucking the blood out of some good looking man: it is also believed that this sort of enjoyment constitutes their only means of sustaining life, and that it is quite enough for the purpose. They are a sort of ubiquitous race, and yet have certain fixed residences in the north of the sky. They have the remarkable power of observing events which take place tens of thousands of miles remote from them, and can likewise travel millions of miles in a minute. The demons belonging to the first of these two classes are neither hideous as those of the second, nor do they eat men, nor even make men sick. In person they are like the gods themselves, with skins of golden hue. They use the ambrosial heavenly food used by the gods.

The second class of demons is subdivided into four minor divisions; viz., 1. *Balli-caama* demons, or those who have a particular attachment to balli offerings; 2. *Billi-caama* demons, or those fond of offerings of living beings; 3. *Ratti-caama* demons, or those who take delight in music, dancing, and other pleasures of that kind; 4. *Hantu-caama* demons, or those who delight in inflicting death. A disease brought on by a Hantu-caama demon is considered to be incurable by any means whatever; but those inflicted by the demons of the other three divisions terminate fatally, only when proper remedies are not applied, viz., those which Demonism affords.

In *Narayena*, the principal authority on the subject of the witchcraft, and to a certain extent of the demonology of India and the neighbouring countries, there appear the names of many demons, such as Asura Yakseya, Awara Yakseya, Heyma Yakseya, Peita Yakseya, Pralaapa Yakseya, Wayissrawana Yakseya, **Kaksepa** Yakseya, Nischella Yakseya, Gandarwa Yakseya, Naga Yakseya, and a great many others. But although *Narayena* is the received authority on the subject of charms among the Singhalese, yet none of these demons, mentioned in it as inflicting evils on men, are

known to the Demonism of the Island. This circumstance is only another proof of the Demon-worship of the Singhalese having had an origin independent both of Brahminism or Hinduism, and of Buddhism.

According to Buddhism, neither *Brahmas*\* nor *Dewo* nor *Yakseyo* are born from the womb of a mother, but suddenly spring into existence full grown. This sort of birth is called *Oapapatika*. Nevertheless the last two classes, viz., *Dewo* and *Yakseyo* may have mothers in a peculiar fashion. For instance, if a demon seem to spring into existence from the shoulder or arm of a female demon, the latter is considered to be his mother. Marrying and giving in marriage prevail among them as well as among men. This is the account which Buddhism gives: but that given by Demonism itself differs very widely from this. It represents demons as having *human* fathers and mothers, and as being born in the ordinary course of nature. This is said to have been the case with almost every demon; but though born of human parents, all their qualities are different from those of men. They leave their parents sometime after their birth, but before doing so they generally take care to try

---

\* *Brahmas* are the highest order of gods inhabiting the 16 highest heavens called *Brahma loka*, as the *Dewo* are the gods next below them in rank, inhabiting the 6 *Dewa loka* situated immediately below the former. *Yakseyo* are the demons. *Brahmas* are supposed seldom or never to interfere in the affairs of men, and are therefore never worshipped or invoked by the Singhalese; and even of the *Dewo*, the people worship only a few of the inferior classes, who do not even dwell in the 6 *Dewa loka*, but on the tops of large trees, and in the air above, not very far however from the earth, in magnificent palaces invisible to man. The *Dewo* of this latter class are called *dewata* generally, and are divided into *Tallatoo* and *Boomatoo dewo*. These are the *dewo* or gods that the people worship, as conferring benefits upon men or punishing them for their misdeeds. The more ignorant of the Singhalese Buddhists know no beings superior to these. These inferior gods are partly Hindoo deities, and partly deified heroes of the Singhalese.

The fact of *Brahmas* being mentioned by Buddha as the highest class of beings in existence, inferior only to himself, inhabiting 16 *lokas* or worlds, is an additional, though a collateral, proof of Brahminism being anterior to Buddhism.

their demoniac powers on them. In the first place they must pay their court to Wissamonny, or to some powerful god, and obtain from him permission to exercise their demoniac powers. They then hover about in the air, and cease to touch the ground; for walking on the ground is strictly prohibited by Wissamonny and the gods; nevertheless, whenever a man says that he has seen the apparition of a demon, he always describes him as having appeared to him walking on the ground like a man.

It also appears in the various accounts given of the birth of demons, especially in the genealogical accounts recited or chanted at the commencement of demon ceremonies, that a demon has the power at any moment (a power which he often exercises) of entering the womb of a woman, where he remains during the necessary period, assuming in their order the various conditions of a foetus conceived in the ordinary way. After the woman's delivery, the child (that is the demon) resumes the exercise of his demon peculiarities, as before. Some demons appear to have been born hundreds of times in this fashion.

If we can believe that there is any particle of truth at all in the existence and in the genealogies of these demons, that little, we think, must be this—that in the very remotest periods, when the Singhalese were peculiarly ignorant and superstitious, and when the principle of Hero-worship was carried to a height proportioned only to the ignorance of the worshipper, there may have lived particular members of the community, who distinguished themselves by extreme ferocity and cruelty of conduct, joined to considerable power, which they exercised either as kings, chiefs, or mere lawless freebooters; and that these individuals after death, and perhaps when living, were worshipped as supernatural beings possessed of irresistible powers of injuring men. We are the more confirmed in this opinion by the fact, that the dewo or gods belonging to Capnism appear to have been no more than creatures of this kind. The mythology and the apotheosis of the Greeks, of the Romans and of most other early nations of the world were, in a manner, only counterparts of this.

There is another class of demons who come into existence by *Oapapatika* birth. These are called *Malla Yakseyo*, or the spirits of deceased men. If a man, who lives at enmity with another, remember, on his deathbed, just before he dies, and at the very moment of his expiring, any thing relating to that enmity, and if, instead of a feeling of forgiveness, resentment and hatred take possession of his mind, he is supposed to become, after death, a demon of this kind. These demons are not so powerful, as those mentioned above, nevertheless they too cause sickness.

There are two places distinguished as the birthplaces of many of the demons. These are *Wisala Maha Newera* (Ujayin), and *Sanka paala Newera*. These cities are said to have, on very many occasions, been laid desolate by demons, either by inflicting disease upon the citizens or by devouring them alive.

To shew the reader that the notion of the possibility of a human mother giving birth to a demon even in these days, is not at all uncommon among the people, we have only to mention an incident which is still fresh in our recollection. A poor woman of our native village gave birth to a child about 23 or 24 years ago; the infant, which was a male, had all its teeth as well developed, as a child of 5 or 6 years of age. Its head too was covered with hair about an inch long, its face was unusually long, and its mouth broader than usual in children of that age. The appearance of the child was not at all prepossessing, and all thought that it was a demon. An hour or two after its birth the grandfather dashed out its brains with a stick. To this day, the people believe that it was actually a demon and not a human being, and this belief will, we are sure, continue for centuries more. On our mentioning this circumstance some years ago, to an English gentleman now high in the Civil Service of this Island, he gave information of it to Government, who in consequence instructed the local magistrate to make an investigation into the matter. But those of the villagers, who were well acquainted with the particulars of the case, considering it more prudent to hold their tongues, than to give information in a matter, in which they were not personally interested, denied all knowledge of it.

Another child was also sacrificed to this same superstition about 25 years ago in a village near Barberyn. In this case, the child was nailed to the stem of a cocoanut tree and so left to die, the best punishment, as was thought, for a demon, who had had the impudence to be born of a human mother. We have also heard of a still more recent case, which occurred some 5 or 6 years ago in the same neighbourhood, but we are not acquainted with any of the particulars connected with it. We have likewise heard of 10 or 12 other cases of this kind, which have occurred within the last 25 years in other parts of the Island, in which ignorance and superstition triumphed both over parental affection and over common sense.

The demons can never inflict disease or receive offerings, unless they have a sort of general permission called *Wurrun*, previously granted to them by Wissamonny, or by some of his principal chiefs, or by some of the gods. And as they cannot *honestly* sustain life without afflicting men, and thereby extorting offerings, they are necessarily obliged to seek and obtain this *Wurrun*, as soon as they enter on life. Inferior and insignificant demons however live on without such a patent, by violating the law, and their sufferings and punishments are therefore very great. The principal offenders of this kind are the demons called *Malla Yakseya*.

Like men, demons also seem to have their own fashionable hours of breakfasting, dining, and supping. *Sanny Yakseya* will accept his offerings only in the morning between 2 and 6 o'clock; *Reeri Yakseya*, *Calloo Yakseya*, *Abimaana Yakseya*, and *Totte Yakseya*, will accept their's only in the evening, between 6 and 10 o'clock; while *Maha Sohon Yakseya*, *Hooniyan Yakseya*, *Uda Yakseya*, the female demons *Riddhi Yaksaniya* and *Madana Yakseniya* will accept offerings at no other hours than those intervening between 10 P. M., and 2 A. M.

Although it is believed that there are millions and billions of demons in existence, yet the number of those who belong to the demon worship does not exceed 50 or 60, and even of these *Reeri Yakseya*, *Calloo Yakseya*, *Sanny Yakseya*, *Maha Sohon Yakseya*, *Calloo Cumare dewatawa*, and *Hooniyan Yakseya*, are the principal individuals, who figure in every demon ceremony in the Island.

I. REERI YAKSEYA or REERI YAKKA\* (demon of blood) is considered to be the most cruel and powerful of all these. He is represented as having the face of a monkey, and the rest of his body like that of a man. The colour of his skin is a fiery red. He uses a red bull to ride on. There is scarcely a single disease, to which a Singhalese man is liable, in which this demon is not supposed to exert an influence. Diseases, which produce a flux of blood from the system, are supposed to be especially inflicted by him. When a man is about to die, this demon is supposed to be present by means of an *avatar*† or apparition called *Maru Avatar*, or apparition of death. On such an occasion he is supposed to assume the dimensions of a pigmy, measuring one span and six inches in height, and carrying in one hand a cock, in the other a club, and in his mouth the corpse of a man; he is supposed to be present at the death bed, or not far off, till the man dies. Every demon, as well as Reeri Yakseya, has several forms of these apparitions or disguises, which he assumes on different occasions according to circumstances, and in each of which he is called by a different name. There is however another opinion entertained by some of the Cattadiyas, that these apparitions are not different disguises of the same demon, but that they are separate individual demons, forming however a sort of confederacy, and all acting together in concert. The former, we think, is the more popular opinion of the two. Nevertheless, in the case of one demon, viz., Sanni Yakseya, these apparitions are sup-

\* Yakseya and Yakka are synonymous terms, of which the latter however is the one which is more commonly used.

† *Avatar* is a Sanscrit term signifying the incarnation of any being or spirit in some particular shape. Among the Hindoos an avatar of being, such, for instance, as that of Vishnoo, is some condition of existence, such as that of a cow, a man, a serpent or some other, which Vishnoo chooses to assume or to be born in. An *avatar* of a demon, as understood amongst the Singhalese, means some disguise which a demon assumes for a few moments or so. It is also supposed that the demon himself is not bodily present at any place where such an avatar is seen, but that he is millions of miles distant from the scene, and yet has the power of creating these avatars and of presenting them to the eyes of men.



posed to be not his own disguised self, but separate individual demons, who act under him and in obedience to his orders. Reeri Yakseya has 18 of these apparitions, or avatars as they are called by the people. In the 1st he is called *Reeri Yakseya*; in the 2nd *Ree Raj-ja*; 3rd *Agu Raj-ja*; 4th *Pulutajja*; 5th *Reeri Gopolla*; 6th *Reeri Buddia*; 7th *Reeri Watukaya*; 8th *Reeri Billey Dewatawa*; 9th *Reeri Kavisia*; 10th *Reeri Sanniya*; 11th *Reeri Curumberaya*; 12th *Reeri Madana Yakseya*; 13th *Lay Avatar Yakseya*; 14th *Lay Caama Yakseya*; 15th *Serra Marulu Dewatawa*; 16th *Maru Reeri Yakseya*; 17th *Maru Caama Yakseya*; and in the 18th *Maru Avatar Yakseya*. Reeri Yakseya is represented to have had above a hundred different incarnations; in one of which he was the son of a king of Sanka pala Nuwera; in another, of a king of Lagal pura; in a third, of a shedemon named Ginimuru Yaksani of a country called Hanumanta Desay; but his disposition and conduct were the same in all.

II. MAHA SOHON YAKSEYA, or MAHA SOHONA means the *Great Graveyard Demon*. He is so named because he chiefly frequents graveyards. He is also supposed to haunt the summits of large rocks and hills, where he delights to surround himself with human carcasses, and to swallow huge morsels of the delicious repast, preferring the entrails above all other parts. He is 81 cubits (122 feet) high; has three eyes, four hands, and a skin of a red colour. His origin is thus given—"In ancient times, there were giants in this Island, men who could defeat even half a dozen elephants in single combat by their mere physical strength. One of these giants, by name *Jaya Sena*, was very fond of displaying his extraordinary strength, even at times when there was no occasion for it, and happening on one occasion to pick a quarrel with *Gota Imbra*, another great giant, the latter with one blow knocked off his head. Precisely at that moment the planet god *Senasura*, who was a spectator of the scene, seized a bear, and tearing off its head from its body, applied it to the headless trunk of *Jaya Sena*, to which through his supernatural power it adhered, and became a part of the body. So the deceased *Jaya Sena* instantly rose up alive as a demon, and has

since been known as *Maha Sohona* in reference to his habits of haunting graveyards.\* In those demon ceremonies, which are performed to obtain the release of a sick man from the influence of *Maha Sohona*, a certain spell or charm called *Gota Imbra Dahanay* is made use of by the *Cattadiya*. In this charm the particulars of this event are narrated at length, and the demon is threatened with further vengeance from his late conqueror, if he does not afford immediate relief to the sufferer. *Maha Sohona* is the chief of 30,000 demons. He also shews himself to men in various disguises or apparitions when he moves about, and on each occasion rides on a particular animal. In one of these apparitions he rides on a goat, and is called *Lay Sohona* or *Blood Demon of the graveyard*; in another he rides on a deer, and is named *Amu Sohona* or the *graveyard Demon of fresh corpses*; in a third he rides on a horse, and is called *Jaya Sohona*, or the *Victorious demon of the graveyard*; in a fourth he rides on a sheep, and is called *Maru Sohona* or the *graveyard demon of death*; in a fifth he rides on an elephant, and is called *Golu Sohona* or the *Dumb demon of the graveyard*; In his own proper person as *Maha Sohona* he rides on a gigantic hog.

---

\* The *graveyards* of ancient times in Southern Asia, and especially in Ceylon, were not what we commonly understand by that term now. Excepting the Buddhist priests and the aristocrats of the land, whose bodies were burnt in regular funeral piles after death, the corpses of the rest of the people were neither burned nor buried, but thrown into a place called *Sohona*, which was an open piece of ground in the jungle, generally a hollow among the hills, at the distance of 3 or 4 miles from any inhabited place, where the corpses were left in the open air to be decomposed, or devoured by dogs and wild beasts. This practice appears to have prevailed in the Island to a comparatively recent period, and in the most secluded and least civilized of the inland districts till about the beginning of this century. Although regular cemeteries are mentioned in the *Maha Wanso* in connection with Anuradhapura, especially during the reign of the Wijeyan dynasty, they do not appear to have been very general either at that time or at any subsequent period. *Maha Sohona* and other demons not having now these (*Sohon*) congenial places for demoniac conviviality, are obliged to be content with the ordinary graves and graveyards of these days.

III. MAHA COLA SANNI YAKSEYA, or the *Great Demon of the fatal diseases*, according to one account, sprang into existence from the ashes of the funeral pile of *Asoopala Cumari*, a princess of the city *Wisala Maha Nuwera*.\* Another account makes him the son of a king of a city, called *Sanka pala Nuwera*. † "This king," says the account, during the pregnancy of his queen, made an incursion into the country in search of some article of *Dolladuk* for her, ‡ and, on returning to his palace a few days afterwards, one of the queen's servants, who was unfriendly to her,

---

\* "Wisala," says Professor Wilson, "is a city of considerable renown in Indian tradition, but its site is a subject of some uncertainty. Part of the difficulty arises from confounding it with Visala, another name of Ujain. According to the Buddhists, it is the same as Prayaga or Allahabad; but the Ramayana places it much lower down, on the north Bank of the Ganges, nearly opposite to the mouth of the Sone; and it was therefore in the modern district of Saran, as Hamilton (*Genealogy of the Hindus*) conjectured."—*Wilson's Vishnu Purana*.

Fa Hian visited Wisala, but does not give any extended description of what he saw. Hium Thsang is more particular, and says that it had fallen into ruin, but that the circumference of the ancient foundations was upwards of twenty miles. He saw the ruins of more than a hundred monasteries. The country was rich, the soil fertile, the climate agreeable, and the inhabitants were bland in their manners, and contented with their lot. There were a few monasteries still standing, but the inmates were little better than heretics."—*Hardy's Manual of Buddhism*.

There is scarcely any other place more frequently alluded to in the demonology of Ceylon, than this city, which in Singhalese is generally known under the name of *Wisala Maha Nuware* which means the "great extensive city."

† Sometimes also, called *Sakaspura*, and in Pali *Sankassa*. "A letter from Lieutenant Cunningham, R. E., to Colonel Sykes, was read before the Royal Asiatic Society, December 3, 1842, giving an account of the discovery and identification of the city of Sankasya mentioned as the kingdom of Kusadwaga in the Ramayana. It is twenty-five miles from Farrkhabad, and fifty from Kanouj on the north or left bank of the Kali Nadi. The ruins are very extensive, and there can be no doubt that they are of Buddhistic origin"—*Hardy's Manual of Buddhism*.

‡ *Dolladuk* is a strong desire which a woman during the earlier months of her pregnancy has for something, generally some article of food. This desire

wishing to ruin her, told the king that she was unfaithful to his bed. On this, the injured king ordered her to be put to death. Her body was to be cut into two pieces, of which one was to be hung upon an *Ukberiya* tree, and the other to be thrown at its foot to be devoured by dogs. When the queen heard of this, she was enraged beyond measure, because she knew that she was wholly innocent. So she said, 'if this charge be false, may the child in my womb be born this instant a demon, and may that demon destroy the whole of this city with its unjust king.' No sooner had the king's executioners done as they were ordered, than the half of the corpse, which was suspended on the tree, falling down on the ground, united itself to the other half which was at the foot of the tree; and the same instant the corpse gave birth to a demon, who first sucked his mother's breasts, then sucked her blood, and lastly devoured her, flesh and bones. He then went to the Sohon graveyards in the vicinity, and there lived upon the carcasses. Afterwards repairing to the city and inflicting a mortal disease on the king, he began with several other demons, who now formed his retinue, to devour the citizens, and in a short time nearly depopulated the city. The gods Iswara and Sekkra, seeing the ferocity of this new demon, came down to the city, disguised as mendicants, and after some little resistance on the part of the demon, they subdued him; on which occasion they ordered him to abstain from eating men, but gave him Wurrun or permission to inflict disease on mankind, and to obtain offerings from them. According to some

---

is often an irresistible one. Sometimes it happens to be a very unreasonable one too. We know a woman still living, who, when in this interesting condition about 15 or 20 years ago, expressed a strong wish to eat the head of a little child, and her husband was able to moderate her cannibal propensity, only by substituting the heads of fishes and other animals for that of a child. The husband and all her relatives and neighbours suspected that such a desire could not but be a prelude to the birth of a demon, and accordingly awaited the event with much anxiety and curiosity. Happily, however, the child did not happen to have long teeth or long hair, and so had the good fortune to escape the fate which it would have otherwise met with.

accounts this demon has 4,448, and according to others 484,000 subject demons under him. He generally rides on a lion, and has 18 principal attendants, the first of whom is called *Bhoota Sanni Yakseya*, or the demon of madness; 2nd *Maru Sanni Yakseya*, or the demon of death; 3rd *Jala Sanni Yakseya*, or the demon of cholera; 4th *Wewulun Sanni Yakseya*, or the demon of cold and trembling fits; 5th *Naga Sanni Yakseya*, or the demon of a disease resembling that from the sting of a *Cobra de Capello*; 6th *Cana Sanni Yakseya*, or the demon of blindness; 7th *Corra Sanni Yakseya*, or the demon of lameness; 8th *Gollu Sanni Yakseya*, or the demon of dumbness; 9th *Bihiri Sanni Yakseya*, or the demon of deafness; 10th *Wata Sanni Yakseya*, or the demon of diseases caused by the wind; 11th *Pit Sanni Yakseya*, or the demon of bilious diseases; 12th *Sen Sanni Yakseya*, or the demon of diseases influenced by the phlegm;\* 13th *Demala Sanni Yakseya*, or the Tamil demon of diseases; 14th *Murtu Sanni Yakseya*, or the demon of fainting fits and swoons; 15th *Arda Sanni Yakseya*, or the demon of Apoplexy; 16th *Wedi Sanni Yakseya*, or the demon of a disease which kills one instantly like a shot from a gun; 17th *Dewa Sanni Yakseya*, or the demon of diseases influenced by the gods; and 18th *Aturu Sanni Yakseya*, or the servant of Maha Cola Sanni Yakseya (the chief of all the 18.) These 18 demons are not considered to be mere apparitions of the same demon, as in the case of the other Yaksoyo, but separate individual demons acting together in concert with their chief Maha Cola Sanni Yakseya.

IV. **ODDY CUMARA HOONIYAN DEWATAWA** † is the son of *Susiri*, queen of *Sagalpura* in *Maduratta*. He always rides on

---

\* *Wind, phlegm and bile* are considered by the Singhalese physicians to be the proximate causes of every sickness, to which man is liable: and in the treatment of any disease, one or more of these three agents have to be influenced.

† Though *dewatawa* is a term, which is generally applied to the inferior classes of gods, and to the superior classes of demons, that do not inflict disease on men, yet it is also sometimes applied by *Cattadiyas*, as in the text, to inferior or malignant demons.

a horse. He has six different apparitions; in the first he is called *Cala Oddisey*, or *demon of incurable diseases*; in the second *Naga Oddisey*, or *demon of serpents*; in the third *Cumara Oddisey*, or *demon prince*; in the fourth *Demala Oddisey*, or *Tamil demon*; in the fifth *Gopolu Oddisey*, or *demon of Cattle*; and in the sixth *Raja Oddisey*, or *Royal demon*. He is the principal demon that has much to do in that department of sorcery called *Hooniyan*.\*

V. CALU YAKSEYA, or the *Black Demon*, is so named on account of the extremely black colour of his skin. He appears in four different apparitions; in the first he is called *Calu Curumbera*, or the *blackest one*; in the second, *Rata Calu Yakseya*, or the *foreign black demon*; in the third, *Dewol Bagey Calu Yakseya*, or the *Black demon of the Dewol gods*; and in the fourth *Siddhi Calu Yakseya*, or the *Illustrious black demon*. He was generated from the ashes of the burnt corpse of Basma, an Asura.† Another account makes him a son of king Wijeyo by Cuveni. A third account says that he is the spirit of a famous giant named *Nesla Maha Yodaya*, who formed one of the bodyguard of king *Gaja Bahu* (113 A. D.) He once accompanied the king on a visit to a country called *Istreepura*, which was inhabited only by females (a race of Amazons), all of whom on seeing him fell in love with him. Hundreds of them seizing him at once, each claiming him as her own, and pulling him this way and that way, he was torn to pieces in their grasp. His spirit having assumed the form of a

---

\* It is not now easy to identify the *Sagalpura* mentioned in the text. Many believe it to be the *Sagal* of King Milinda, who is celebrated for his controversies with Nagesena; but this opinion is hardly tenable, when we consider that the capital of Milinda must have been somewhere in or near Cashmere, and that Messrs. Wilson, Bird, and Masson, consider it to have been situated between the rivers Ravi and Pipasa in the Punjab; while the *Sagal* of the text is expressly mentioned as being in Maduratta, which is on the opposite side of India.

† *Asuras* are a race of beings of enormous size, supposed to reside under the mythical rock *Maha Meru*. They are the Titans of Singhalese mythology.

Demon is now always trying to avenge his wrongs on the whole female sex. Women and little children are therefore supposed to suffer from his malign influence.

6. CALU CUMARA DEWATAWA or the *Black Prince* is the son of king Boksella and his queen Sonalu. He shews himself to men in seven different apparitions; in the 1st he is called *Handung Cumara*, or *Prince of sandal perfumes*;<sup>\*</sup> in the 2nd *Andung Cumara*, or *Prince of Eye Ointments*;† in the 3rd *Mal Cumara*, or *Prince of flowers*; in the 4th *Gini Cumara*, or *Prince of fire*; in the 5th *Dala Cumara*, or the *Rough Prince*; in the 6th *Sohon Cumara*, or *Prince of graves*; and in the 7th *Wata Cumara*, or

---

\* There is scarcely a single offering made to any demon in which *Sandal wood* does not form a constituent part: and Demon worship, be it remembered, is a system, which seems to have prevailed here from times anterior to those of Wijeyo himself. This circumstance, taken together with the fact, that the Chinese writers actually mention Sandal wood as forming in early times an article of export from this Island, seems to favor the idea, that the article must have been growing in the Island in considerable quantities in early times, though at present specimens are to be met with only in a few spots, and those preserved rather as objects of curiosity and ornament than for use.

† The *soot*, which is produced on a piece of porcelain when held to the lighted wick of a lamp, is scraped up and mixed with a little cocoanut oil, when it acquires the name *andung* or *Eye Ointment*, so called because it is rubbed on the outside of the eyelids of very young infants by Singhalese mothers, who believe it to be productive of some benefit to the eyes. Can it be that this benefit is the protecting of the tender eyes of the young infant from being dazzled by too much light, that the black pigment is laid all round the cornea of the eye in order that it may imbibe all the straggling rays of light which, falling on the parts nearest to the cornea, by reflection, tend to injure the tender retina by an overabundance of light? If this be the case, it will warrant the supposition, that the Singhalese were *practically* acquainted with the Theory of Light, tens of centuries before Newton was born. The practice is one of the most ancient among the Singhalese.

This Eye Ointment also forms an important item in the offerings made to demons in many demon ceremonies: but for what use it is intended to serve a demon it is difficult to guess. In a certain ceremony performed to propitiate the demon *Calu Cumara dewatawa*, the Cattadiya, who performs the ceremony, paints his eyelids with this Ointment.

*Prince of a smooth body.* He is always tormented by the passion of love, and when his evil influence falls upon females, it is supposed to make them ill. Young and fair women are particularly exposed to his attacks. Another account says that he was the son of a king, and that afterwards on taking orders as a Buddhist priest his piety and sanctity of life became so great, that, besides other super-human powers, he acquired that of flying through the air like a bird, but that on a certain occasion, while so moving in the air, seeing the beautiful daughter of a certain king of India, he was so much struck with her beauty, that he fell in love, and losing at the same time all his supernatural powers dropped down on the very spot, where the object of his passion was standing at the time. His passion was so intense, that it broke his heart, and he died on the spot, and became a demon, since called Calu Cuman Dewatawa. He is considered to be a demon of great respectability, more civilized and less savage than the rest of his fraternity. Great care is therefore taken in the preparation of his offerings. Rice of the best quality and cooked in the best manner, the best kinds of plantains, sugar canes, oranges, king-cocoanuts, sugar, and several varieties of cakes, constitute the principal articles in the offerings made to him. His person is of a dark blue colour, and his garments of a deep black.

VII. AHIMANA YAKSEYA was born of an *Aandy*\* woman. His father was a king of Gururatta in Casee-dayse. He is known under three other names, *Ollala Yakseya*, *Malala Yakseya*, and *Cotta Yakseya* or *short demon*, so called in reference to the short stumps of his legs, which were cut off in a battle fought with king Wijeyo.

VIII. TOTA YAKSEYA, son of king *Malala* and his queen *Sandagana* of the city of *Sandagana Nuvera*, passes most of his time at the ferries and fords of rivers; and it is at these places that he casts his influence on men.

---

\* *Aandy* is the name of a class of Moormen, whose sole pursuits are begging and fortune-telling. They are the Gypsies of Ceylon. Their language, religion, and dress are the same as those of the Moormen, but still it is open to doubt whether they are of the same race.



IX. **BAHIRAWA YAKSEYA** is another demon as much attached to the female sex as *Calu Cumara dewatawa* himself, but there is this difference between them:—while the latter brings only slight diseases on the objects of his attachment, the former inflicts those that result in speedy death. The hill called *Bahirawa Canda*, which stands towering like a giant over one side of the town of Kandy, was till very lately supposed to be the abode of this demon. In early days it was regarded with feelings of dread. One of the former kings of Kandy, seeing that he was not likely to have any issue to perpetuate his line on the thorne, his queen miscarrying within a few months of her confinement whenever she was pregnant, assembled all the astrologers, soothsayers, cattadiyas, and other men of similar crafts, to his palace, and on consulting them as to the cause of his misfortune, was told, that the queen was under the influence of the demon *Bahirawa Yakseya*, who would never remove his influence from her, unless a yearly sacrifice of a young virgin was made to him on the summit of *Bahirawa Canda*. The king did as he was directed, and it is said that, after that, he had several children born to him. But when his queen grew old and past the time of child-bearing, he discontinued the offering as unnecessary, on which, it is said, the displeased demon began to inflict diseases on the royal family and on all the citizens, in so much that within two months the city was nearly depopulated. By the advice of his ministers and the *Cattadiyas*, the king resumed the former practice of making the annual sacrifice, to which all his successors, till the very last, faithfully adhered. The sacrifice was performed at night in the following manner:—A stake being driven into the ground on the summit of the hill, the girl was tied to it with jungle creepers; flowers and boiled rice were placed close by on an altar constructed for the purpose; certain invocations and incantations were then pronounced, which completed the ceremony. The next morning the girl was found dead; and no wonder, for it would be a miracle, if a Singhalese, especially a young female destined to propitiate a demon, left alone for a night on the top of a hill supposed to be haunted, and tied to a stake, with the sound

of the terrible charms still ringing in her ears, did not die through fright within an hour. There is, however, an old woman still living in Kandy, who was so offered up to the demon, in the time of the last king, Sree Wickrama Raja Singha, but who somehow or other managed to effect her escape. Besides this annual offering, there were others of a less important character, made 3 or 4 times every year to the demon on the same hill. There are seven other demons also known by the same name Bahirawa, but all the eight form a sort of company. When at Kandy on Circuit with the Supreme Court, I twice ascended the hill, and stood on its summit on the very spot, on which I thought the fatal stake must have been fixed. The summit is a small level area, not more than 20 or 25 feet square. Although the demon is said to have left the mountain soon after the British took possession of Kandy in 1815, yet even now few Singhalese have the hardihood to go to its summit alone at night, especially on a Saturday or a Wednesday night.

X. MADANA YAKSENIYO, or *Female demons of Lust*, is the common name of seven sisters, namely *Cama Madana*, or *demon of Lust*; 2 *Gini Madana*, or *demon of fire*; 3 *Mohanee Madana*, or *demon of ignorance*; 4 *Ratti Madana*, or *demon of pleasure*; 5 *Cala Madana*, or *demon of maturity*; 6 *Mal Madana*, or *demon of flowers*; and 7 *Puspa Madana*, or *demon of Perfumes*. These demons, when worked upon by certain charms, and propitiated with certain offerings and ceremonies, are supposed to use their power of seducing the affections of a man or a woman in such a manner, that the person so influenced is said to find the power perfectly irresistible. There are hundreds of ways, in which it is pretended that this can be done; among others, by touching the person of a female with the young leaf of a king cocoanut tree, previously subjected to the incantations and other ceremonies peculiar to the mysteries of the art; by the man rubbing on his face a charmed medicine and then shewing himself to her; by mixing some love potion, similarly charmed, with her food; by making her chew charmed beetle leaves; by carrying on his person a charmed thread previously taken from a cloth she had worn; or by any of

a hundred other ways, in all of which the Madana Yakseniyo become useful agents in the hands of the magician. But the most efficacious and unfailing of all these methods is considered to be a certain oil called *Madana Tayiley*, a single drop of which, sprinkled on the person of a female, is supposed to act irresistibly on her: but the preparation of the wonderful oil is said to be fraught with so much danger to those engaged in it, that few or none dare to attempt it, and those who do, seldom or never succeed, as the demons are supposed to do their best to disappoint the men by frightening and scaring them away from the scene of their operations, which is said to result in the incurable insanity and eventual or immediate death of the operators.

A short time ago we found the inhabitants of our native village in a high state of excitement, owing to the freaks that a mad man was playing in the neighbourhood. It was said that he had become a maniac by attempting to make the oil Madane Tayiley; that he had, for the last few days, been living in the woods eating serpents, frogs, and other loathsome creatures; that he stirred out in the darkness of the night with no other clothing on his person than a few green *Gurulla* leaves\* tied round his waist; that he carried in his hands a man's skull and a bone, and on his shoulders a pot of human blood, which he used to slake his thirst; and that his favorite sleeping places were graves. For three or four days together nothing else was talked of in the village. By and bye the real truth eked out from other sources, but not from the villagers themselves. It appeared that a mad man, a native of Salpitty Corle, breaking loose from his keepers, had wandered about from village to village, and that during these wanderings he happened one night to pass through the villages we have alluded to above, accompanied

---

\* *Gurulla* or *Burulla* is a kind of plant, between which and the demons there seems to be some mysterious connection. It is used in the construction and decoration of the altars and other structures, which are made in many of the Demon ceremonies. The Cattadiya sometimes adorns his head and his waist with its leaves in certain ceremonies.

by a relative, who had come to take him home, and that this relative was the first to tell one of the villagers of the cause of the madness. By the next morning the report had spread through the village like wildfire, magnified and ornamented with the additions we have given above. The villagers themselves were, however, loth to believe the truth, when we told it to them, denuded of the additions they had made to it. The relative of the madman told us, a few days afterwards, the cause of the madman's misfortune; he described to us, how the man had endeavoured to make Madana Tayiley, about a year ago, and had been frightened by demons just at the moment of the oil becoming perfected, and how he, in consequence, had become a maniac. Although Madana Yak-seniyo and their wonderful oil are matters, about which we and this relative of the madman essentially differ in opinion from each other, yet, as to the mere fact of the man having become mad on such an occasion, we do not differ at all; for considering the extent of superstitious fear, which is ever present in the mind of an ignorant Singhalese, and especially on such an occasion, as that of preparing the oil of the demons, in the dead of night, on a lonesome grave, in a lonely part of the village, and his belief in the presence, at the scene of his operations, of cruel and powerful demons, whom he himself has but just invoked, and that these demons are ready at any unguarded moment, during the process of making the oil, to pounce upon him and destroy him and his oil—when we consider these things, it is not at all improbable that a Singhalese, through mere excess of fright and an overexcited imagination, should lose his reason and become a maniac.

XI. MOROTTOO YAKA, or *Demon of Morottoo*, or *Rata Yaka* or *Foreign demon*, is so named from his being a foreigner who landed at Morottoo, when he first came over into this country from the Malabar Coast. Soon after his landing, he fixed his residence on the top of a large tree in the neighbourhood of Morottoo, and whilst living there he brought so much sickness upon men, and especially upon children and women in a state of pregnancy, that the whole district was said to have been filled with mourning during

every part of the year. For a long time he continued to exercise his malignant power, till on one occasion he brought sickness on the queen of Sree Prakrama Bahu VI., king of Cottah, which was then called Jayawardanapura (1410 A. D.) When the king found, that the medicines of the most skilful physicians of his *Gabadawa*, or Royal College of Physicians, were of no avail, he consulted the most learned men of his kingdom as to the cause of the Queen's illness, and learned from them that it was caused by *Morottoo Yaka*. Only one Cattadiya however in all his kingdom knew the ceremony, by which the demon could be appeased. That ceremony called *Rata Yakum Neteema*, or *Morottoo Yakum Neteema*, was accordingly performed, and the royal lady was restored to health.

XII. GOPOLU YAKSEYA, or the *Demon of cattle*, was the son of a king or chief of a district on the Coromandel Coast. He was the twinbrother of *Mangara Dewiyo* (a demigod;) their mother having died soon after their birth, a cow-buffalo suckled them: but Gopolu having on one occasion sucked all the milk without leaving any for his brother, a quarrel ensued, in which Gopolu was killed, but being born again, as the nature of demons is, he came over to Ceylon, and landed at Arangodde near Katragamma. At Arangodde he lived on a Banyan tree in which there was a large beehive, and scattered disease and death among all who came near the tree. His old enemy *Mangara dewiyo* and *Pattini dewiyo* (goddess of chastity) came afterwards to Ceylon, and, happening to land at the same place, saw a number of men lying under the tree, some dead and others dying. Knowing the cause, they immediately ordered the neighbouring villagers to bring a cow-buffalo, which they ordered to be offered up in sacrifice to Gopolu, on which the dying men recovered and returned to their houses. He is called the demon of cattle, because all cattle sickness is supposed to proceed from him. He is also considered to be the cause of hydrophobia.

XIII. ANJENAM DEWI is a female demon, by whose aid a certain art of divination called here *Anjenam beleema*, and elsewhere, as in Egypt, *divining by the Magic Mirror*, is performed. She is the chief of 700 other female demons.

XIV. **BADDRACALI**, is a female demon, whose assistance is sought for winning lawsuits, and for subduing enemies and rivals of any kind.

XV. **RIDDHI YAKSENIYO** are seven female demons, who also bring disease on men, like any other demons.

XVI. **UDA YAKSEYO**. There are many demons of this name. They are as cruel, as any of the preceding.

XVII. **CURUMBERA YAKSEYO**. Of this name also there are several, all equally prodigal of their powers of inflicting sickness.

XVIII. **HANUMA** is another powerful demon of great cruelty.

These are the principal demons, who figure in Demon Ceremonies, either as having caused disease, or as the effective agents in curing it. But there are also a very large number of demons of inferior power, collectively called *Mala Yakseyo*, who also inflict diseases of a less malignant character. These demons, as mentioned in a preceding page, are, as their name implies, the spirits of deceased men, born as demons in consequence of some demerit of theirs when living as men, or of some feeling of animosity or hatred, which was uppermost in their thoughts at the moment of death.

In addition to both these classes of demons, there is a third, which includes a few demons of a different kind. These are *Gara Yaka*, *Dewalla Yakseya*,\* *Bodrima*, and the *Pretayo*.

XIX. **GARA YAKA** has no evil disposition, like those already described. He does no harm whatever to men, but on the contrary assists them in expelling all sorts of evil influence, to which new houses are supposed to be subject. Hence, when a house has been built, before or soon after its occupation, a ceremony called *Gara Yaka Maduwa* is generally performed, without which it is supposed that some misfortune will fall upon the inmates. *Gara Yaksoya* is represented to be an individual of a voracious appetite and a capacious stomach. On one occasion *Pattini Dewiyo*, the goddess

---

\* *Yaka* and *Yakseya* are synonymous terms, both equally used by the Singalese. The first is derived from the Pali *Yakkho*, and the second from the Sanscrit *Yaksha*.

of chastity, having to accompany the wedding procession of *Canda Cumara* (the god of Kattragam), but not wishing to do so, because the house, together with all the furniture prepared for the reception of the guests, was wholly constructed of the bones and skins of animals (the adopted father of the bride happening to be a Weddah), she ordered Gara Yakseya to go there in time, and see what he could do before her arrival. Accordingly he went to the house in the character of *Gamana*,\* and not seeing any better way of clearing the house of its disagreeable furniture, at once fell to devouring every thing, and in a short time the whole building with all its furniture was deposited in his stomach; to show his host, that he did this merely to satisfy his hunger, and not for any other purpose, he, even after this feat of gastronomic power, said that he was still very hungry. Before he commenced to eat the house, he had also eaten all the food, that had been prepared for the whole wedding party. Lastly, to satisfy his thirst, he drank some thousands of young Cocoanuts, and then drank up all the wells in the neighbourhood: and after all this, he left the house in great displeasure, saying to his host, as he was leaving him, "you, fellow, have starved me; a nice way indeed of treating the *Gamana* of a son-in-law. Oh dear, I am dying of hunger and thirst."

XX. GEWALA YAKSEYA, or *House demon*, lives in the dwellings of men. These demons are innumerable. They are the spirits of those, who lived and died in the houses they now haunt, and who on their deathbed had thought much more of the money or other valuables they had hoarded up in the house,† than of their souls.

---

\* About an hour or so before a bridegroom accompanied by his friends arrives at the house of the bride, a person, named for the occasion *Gamana* or *messenger*, is sent forward with a number of betel leaves equal to the number of people, who accompany the bridegroom. The *Gamana* is to give these betel leaves to the bride's friends, together with the large *pingo* of plantains called *Gira-mul-tada*, which in the Maritime districts is always a *sine qua non* of the presents, which a Singhalese bridegroom carries to his bride's house.

† The Singhalese, especially the poorer classes, generally secrete their money in holes dug in the floor, or in the walls of their houses. In a case of burglary which was tried at Kandy before the Supreme Court about a year ago, it was

They are fond of throwing into confusion the cooking utensils and crockery, and of continually opening and shutting the boxes in the house, if the inmates do not take care to secrete the keys, unobserved by the spirits. The jingling of coin, the sound of strange footsteps, and the creaking of door-hinges are frequently heard. The demon does not like to see the inmates eat and drink and enjoy themselves. When these latter sit together at their meals, he gets so annoyed by the sight, that he seizes them by the hair and knocks their heads against each other. He is of course invisible to men, like all other demons, but is possessed of no power to inflict disease.\* He belongs to the class called Mala Yakseyo.

XXI. **BODRIMA** is a female demon, at first originating no doubt in the nursery, but at present believed to be a real existence. She is the ghost of a woman, who has died in child-birth. She is said to be heard at night, wailing and groaning in a peculiar manner; and if she sees a man passing by, she immediately springs on his back, and, fixing her fingers and long nails in his throat, tries to choke him to death. She however is afraid of women, and especially of a woman with a house-broom in her hand. When she is supposed to be heard at night groaning in her peculiar way, and approaching a house, the male portion of the inmates take care to remain inside, while the women, especially the elder, go out of the house with brooms, and abuse the demon with such a string of epithets and names, as would seem enough to drive, not only one Bodrima, but the whole race of demons from this terrestrial globe. On such occasions, people sometimes place at some distance from the house a lighted lamp and some betel leaves, which the demon is said to hold one by one over the lighted wick, and warm and foment her abdomen with. If she were to be fired at, there would

---

proved that a portion of the stolen property, consisting of some £3 or £4, had been concealed by the thief under the stone in the fire-place, as the least likely place to be suspected of concealing money.

\* There are certain ceremonies performed to expel a *Gewala Yakseya* from a house, especially the *Perit* ceremony performed by Buddhist priests, generally during three days and four nights.



remain, it is said, nothing to be seen next morning, but a dead lizard. She is described as being so fat and short, that, when she moves, she appears rather to roll like a cask, than to walk.

XXII. The PRETAS are entirely a different race of beings from all that have yet been mentioned. They are the most helpless and miserable creatures in existence. They live only to suffer. Their life itself is a punishment, in which they expiate the sins of a previous state of existence. Their only aliment is spittle, or some other kind of loathsome matter, and even when they get a little of this, their destiny precludes them from making any use of it, and, like king Tantalus they can only look at it with a burning desire. The number of these beings is so great, that a Pali Buddhistical work, which lays down certain rules of discipline for the guidance of the followers of that religion, admonishes them not to throw stones or sticks, nor even to swing their arms when walking, lest they may strike a Pretaya and injure him. The Pretayo are invisible to men; they are of various degrees of stature, some reaching to the height of 3 or 4 hundred feet, others only of one or two feet. Their sufferings from hunger and thirst are indescribably dreadful, and to make their case the more miserable, their appetites are much stronger, than those of any other race of beings. They die several times in a day from sheer starvation, but owing to the inexorable destiny of their race are born again the same instant, to undergo the same round of sufferings over and over again, until they have completed the period of time allotted to them according to their respective sins, after which they are born in some other state of existence, either as Brahmas, dewiyo, men, inferior animals, or in hell, according to the merits of each, acquired in some other previous states of existence. Of course, they are the most loathsome looking creatures imaginable. Their skins hang about them in loose folds, and are so covered with dirt and vermin that they are supposed to emit a disagreeable smell, said to be perceived sometimes at a considerable distance. This smell is sometimes identified by a Singhalese with a peculiar unpleasant stench, often perceived near trees and bushes, caused as we believe, by the effluvia

arising from decomposed leaves and sticks. Their bodies are literally mere skeletons, and as the fleshless ribs project on each side, they are obliged, when they wish to lie down, to lie on their backs,\* Had Dante ever heard of Ceylon *Pretayo*, he would have been able to make his *Inferno*, terrific as it already is, still more terrific by the picture of a Pretaya figuring among those miserable beings, with whom he has peopled it. The Pretayo are not included in Demon worship. They are not possessed of power to injure a man in any other way, than by spoiling his appetite, which they effect by *looking with desire* at the food he is about to take; but this is a power, which is attributed to dogs and men and some other creatures, as well as to Pretayo. When any kind of food, especially meat, is sent from one house to another, care is generally taken to cover it well, and to put on the top of the cover a piece of iron of any kind or size, as a precaution both against the *Pretayo* and against the Yakseyo demons, who otherwise might affect it with the mysterious influence, which *looking at* it would produce. Children are seldom fed in the verandah of a house, and a Singhalese mother would rather die than allow her child to eat anything in the open compound or yard of the house. Even a medical decoction, during the process of being prepared on a fire, is not considered safe from this mysterious influence, and a piece of iron is often tied for protection to the vessel, which contains the preparation.

The Pretayo, like the *Brahmas*, *Asuras*, *Cumbhas*, *Gandharwas*, *Garundhas*, and *Nagas*, are creations of Buddhism, and not of mere popular fancy.

The chief of all Ceylon demons is WAHALA BANDARA DEWIYO, or as he is more commonly termed, *Wahala dewiyo*. His principal temple, called *Gala cap-pu dewale*, is at *Alutnuwera*, a village about 11 miles from Kandy on the road to Colombo. This temple

---

\* When a person sleeps on his back, the posture is derisively named *Preta Seyiyawa*, or the *sleeping posture of a Pretaya*; lying on the face is called *Manduka Seyiyawa* or the *sleeping posture of a frog*; lying on the right side with the right hand placed under the head is considered the most becoming posture in sleeping, and is called *Singha Seyiyawa*, or the *lion's sleeping posture*.

is believed by all Demon-worshippers to have been built in a remarkable manner; and the circumstance is often mentioned, as one of the proofs of the authority, which the Dewatawa is supposed to exercise over his subjects the demons. It is said that the demon chief, a long time ago, wishing to have a new temple constructed and consecrated to him, in place of the old one in which his service had till then been performed, ordered some thousands of his subject demons to cut and smooth down a rock, which was some seven or eight hundred feet high, so as to fit it for the site of the intended building, they were however to use no other tools, than the common jungle canes called *Way Well*,\* with which they were to rub the rock, till by mere friction it should be reduced to the desired level. The demons engaged in the work were, no doubt, those, who having violated his laws were then undergoing the sentence of hard labour. They however succeeded in executing the work in the manner directed in the course of a single night, and hence the name *Gala-cap-pu dewale*. Pilgrims from every

---

\* *Way Well* is a climbing plant, which grows to considerable dimensions in the jungles of Ceylon. It is covered with a coating of short but very sharp thorns. One species of it is used as a *file* by the people of the inland districts for rasping the hard kernel of the nut of the *Sal* tree, of which they make a sort of pudding. Being a *Rattan* of great strength, it is used for a variety of purposes, such as making baskets, *rattaning* chairs and couches, and even for making rude suspension bridges in the secluded parts of the island. The following is a description of one of these bridges by Sir J. E. Tennent.

"One which crossed the falls of the Maha Welli Ganga, in the Kotmalie range of hills, was constructed with the scientific precision of an Engineer's work. It was entirely composed of the plant called by the Natives "*Way Well*," its extremities were fastened to living trees, on the opposite sides of the ravine, through which a furious and otherwise impassable mountain torrent thundered and fell from rock to rock with a descent of nearly 100 feet. The flooring of this aerial bridge consisted of short splints of wood, laid transversely and bound in their places by thin strips of the *Way Well* itself. The whole structure vibrated and awayed with fearful ease, but the coolies traversed it though heavily laden; and the European, between whose estate and the high road it lay, rode over it daily without dismounting"—Sir J. E. Tennent's *History of Ceylon*, Vol. I. part I. ch. iii.

part of the Island repair to this temple during all seasons of the year, hoping to get relief from some demon influence, with which they suppose themselves to be afflicted, and which appears to them to be irremovable by any other means. This is especially the case with those persons, most frequently women, who are supposed to be possessed by a demon. Dancing, singing and shouting without cause, trembling and shaking of the limbs, or frequent and prolonged fainting fits are considered the most ordinary symptoms of possession by a demon. Some women, when under this imaginary influence, attempt to run away from their homes, often using foul language, and sometimes biting and tearing their hair and flesh. The fit does not generally last more than an hour at a time; sometimes one fit succeeds another at short intervals; sometimes it comes upon the woman only on Saturdays and Wednesdays, or once in three or four months; but always invariably during the performance of any demon ceremony. On these occasions temporary relief is obtained by the incantations of the Cattadiya; but when it appears that no incantations can effect a permanent cure, the only remaining remedy is to go to *Gala hep-pu Dewale*, where the following scene takes place. When the woman is within two or three miles of the temple, the demon influence is supposed to come on her, and she walks in a wild, hurried, desperate manner towards the temple. When in this mood no one can stop her; if any attempt it, she will tear herself to pieces rather than be stopped. She walks faster and faster, as she comes nearer and nearer to the holy place, until at last, on reaching it, she either creeps into a corner, and sits there, crying and trembling, or remains quite speechless and senseless, as if overpowered by extreme fear, until the Capua begins the exorcism. Sometimes she walks to the temple very quietly, without any apparent influence of the demon on her, and that influence seems to come upon her, only when the exorcism begins. The principal room of the temple is partitioned off by curtains into three divisions, the middle one of which is the sanctum sanctorum of the God, as the demon chief is generally called. The Capua stands

outside the outermost curtain, with the woman opposite to him. After the offerings of money, betel leaves, and silver ornaments\* have been devoutly and ceremoniously laid in a sort of small box opposite to the Capua, he tells the god as if he were actually sitting behind the curtain at the time in a loud and conversational tone, and not in the singing ornamental style of invocations made to other gods and demons, that the woman (*naming her*) has come all the way from the village (*naming it*) situated in the Corle or district (*naming it*) to this temple, for the purpose of complaining to his godship of a certain demon or demons, who have been afflicting her for the last five years (*specifying the time she has been under the influence*); that she has made certain offerings to the temple, and that she prays most humbly that his godship may be graciously pleased to exorcise the demon, and order him never to molest her again. In this way he makes a long speech, during which the woman continues trembling and shaking in the most violent manner, sometimes uttering loud shouts. Presently the Capua puts to her the question, "*Wilt thou, demon, quit this woman instantly, or shall I punish thee for thy impudence*"? To this she sometimes replies, still trembling and shaking as before, "*Yes, I will leave her for ever*," but, more generally, she at first refuses; when this happens, the Capua grasps in his right hand a good stout cane, and beats her most mercilessly, repeating at the same time his question and threats. At last, after many blows have been inflicted, the woman replies "*Yes, I will leave her this instant*"; she then ceases to tremble and shake, and soon recovers her reason, if indeed she had ever lost it. So she and her friends return home, congratulating themselves on the happy result of their journey; a

---

\* One of these ornaments is often a *Carandua*, or conical box resembling a *dagoba*, made of silver, and intended as a sort of shrine or receptacle for some holy relic. A silver arrowhead and an image, made of a beaten plate of silver of about two inches in height, intended to represent the person suffering from the Demon influence, are also sometimes added to the other offerings. The money offered to a god or demon is always called *Panduru*, which means *ransom money*.

result, which is invariably the same in the case of every pilgrim to the temple. We know 30 or 40 women who have made this pilgrimage, only two of whom have ever again shown any symptoms of the return of demon possession. It is said that some 30 or 40 years ago, especially during the time of the Kandyan Kings, four bundles of canes were left at the temple by the Capua every evening before he returned home; that during the night loud shouts and cries and wailing were heard proceeding from the temple, and that the next morning, instead of bundles of canes, there were only small bits of them found dispersed here and there in the premises, as if the canes had been broken in flogging disobedient demons.

---

## CHAPTER III.

## HOW DEMONS INFLICT DISEASE.

The demons enumerated in the preceding pages are those, who are supposed to inflict disease on men, and who therefore principally figure in the various Ceremonies of Demon worship. They are supposed to exercise their malignant power by virtue of the Wurrun permission, which they have obtained for that purpose from King Wessamonny, from the principal demon chiefs, or sometimes from some of the gods themselves. Originally when they were in a lawless state, they enjoyed themselves to their hearts' content, by seizing men wherever they could and eating them up alive, like so many oysters. But after a time these liberties were restrained to a certain extent, and they were allowed to eat human beings, only when the latter happened to come under the shade of the tree on which they lived, or within a certain distance of whatever place they had made their residence. Lastly, cannibalism was wholly prohibited, and, in place of it, permission was given them to inflict disease, and thereby receive offerings, with which they were required to be content.

Their usual hours of stirring abroad are called *Yama*. These are 1st, the morning twilight, when there is still some degree of darkness over the earth; 2nd, Mid-day, about 12 o'clock; 3rd, the evening twilight before it has grown very dark; and 4th, Midnight about 12 o'clock. During these Yamas, they stir abroad, as much in search of human victims as by way of recreation. A Singalese never travels during these Yamas, if he can help it; but if not, he takes care not to go alone (unless it be the midday Yama), unless the country is very thickly inhabited, for solitary travellers are most exposed to the attacks of the demons. There are also certain circumstances in the condition or disposition of an individual, which make it easier for a demon to inflict disease on him; these are—1, when the man is asleep; 2, when he has his person perfumed with fragrant unguents and oils; 3, when he travels in a palanquin at night; 4, when a woman is in labour; 5, when the predominant

feeling in the mind of a girl at the moment of her arriving at puberty is grief, love, or fear; 6, when a person takes his meals when his mind is not at ease; and a variety of other occasions.

The usual haunts of the demons are, 1st, large trees, especially *Bo*, *Nika*, *Ruk-attana*, *Ironwood*, *Cohomba*, *Banyan*, *Kong*, *Ehella*, *Yakberiya*, and *Belli trees*;\* 2nd, paths and roads; 3rd, the junction of two or more paths; 4th, ferries and fords; 5th, wells and other places where people come for water; 6th, places, where there are two rocks close to each other; 7th places, where there are two large trees standing near each other; 8th, the seashore; 9th, thick groves of trees and pleasure gardens; 10th, the outskirts of Dewales (temples of the gods;) 11th, graves and graveyards; 12th, tops of rocks and hills; 13th, places where the noise of quarrels and loud voices is continually heard; 14th, streams of water; 15th, battlefields; 16th, woods composed principally of *Belli trees*; 17th, places where washermen wash clothes; 18th, old deserted houses; 19th, large open plains or fields; and 20th, sometimes (not often) close behind the dwelling houses of men.

At these places the demon frightens people not by actually seizing them, but by other means quite as effectual. He sometimes throws sand or stones at them, often handful after handful, along a considerable part of their way; sometimes he appears as a dark featured man on the road or among the bushes near it; or he only shews himself like the passing shadow of a man, followed immediately by a shower of sand or a loud crashing noise among the bushes, as if a number of elephants were actively engaged in beating down the jungle; or he presents himself in the disguise of an old man, or of a young woman with a child in her arms, or merely like a man with a white cloth wrapped round his person from the

---

\* It is on this account, that a Singhalese seldom allows any of these trees to grow very large, when they are situated near his house. He generally cuts them down, before they become fit for the residence of a demon; nor on the other hand will he willingly cut down one which is already very old, fearing it might provoke the demon, who is supposed to be living on it, and bring down implacable vengeance on himself and his family.



top of the head down to the ancles. Sometimes the travellers find the road blocked up by a large tree lying prostrate across it with all its branches and leaves quite fresh, and if they try to go some other way, they find themselves similarly obstructed by trees and thick jungle, in places where there were none before; or they hear a loud hoo\* shout, which however nobody else in the neighbourhood hears, but they; or a large black dog, or a monkey gives them chase; or they hear the sound of footsteps behind them, as of somebody coming up, but on turning round they see no one, and so they continue their journey, but hardly move a fathom before they hear the same sound again, more distinct and louder, and yet there is nobody to be seen; or when they are quietly moving on, they receive near a certain large tree a smart blow on the back from the cold open hand of somebody, who is no where to be seen; sometimes they see a man, a stranger, crossing their path at a short distance in front; or they see a man standing a little out of the road appearing at first to be of the ordinary stature of men, but gradually becoming taller and taller, till he overtops the neighbouring cocoanut tree itself. A Singhalese, to whom any of these things happens, is sure to be so much frightened, as to get some serious illness; on some, their superstitious terrors have had so strong an effect that they have dropped down on the spot perfectly senseless, and have been carried home in a hopeless state, and died within a few days; some have managed to run home but have been taken ill there, and have either died, or recovered only after three or four months of suffering, while others have become raving maniacs for the rest of their lives.

Although demons are said to shew themselves in these ways to men, yet the opinion of those, who may be called the more orthodox of the demon-worshippers, is that these apparitions are not the demons themselves, but certain puppet-like spectres, which

---

\* A Hoo shout is one peculiar to the people of this island. It consists of a loud, single, guttural sound, uttered as loud as a man's lungs permit. A quarter of a mile is generally considered to be the distance at which a loud Hoo can be heard.

they create and present to the eyes of men, in order to frighten them; that the demons themselves are millions of miles distant from the earth; and that on these occasions of sending forth these spectres, and on every other occasion, whether during demon ceremonies, or at any other time when they are supposed to be present, they do not come themselves, but send their *dristia*, with or without the spectres, according to the circumstance of each case, or merely according to their own whim. By *dristia*, which means literally "sight," or "look," is meant that, although they are not personally present, yet they have the power of "looking" at what is going on below, and of doing and attending to every thing required of them, as if they were actually present. This opinion however is one, which is confined to the more learned of the demon worshippers; the more ignorant believe that the demons themselves are bodily present at these scenes, although they assume some sort of disguise, whenever they choose to make themselves visible to men.

When a man is frightened by a demon, and has the influence of that demon upon him, it is called *TANICAMA*, which literally means "loneliness" or "*being alone*." Fright is in most cases a necessary agent in bringing down *Tanicama* on a man; but it is also possible that a person, who has neither been frightened by a demon, nor been ten yards from his own door for five or six months, may also get the *Tanicama* influence on him. In this case, the explanation is, that the demon has taken advantage of some unguarded moment in the daily life of the man, as when he has been sitting in the open compound of his house, or when he has happened to go to the back of his house at any of the Yamas, when a demon has happened to be in the vicinity; or when he has eaten roasted fish or eggs, while sitting outside in his Verandah on a Wednesday or Saturday. In this case the man is neither frightened by anything, nor even aware of his danger at the time.

When *Tanicama* comes upon a man, he falls sick and even when a man is ill from some other cause, no matter what, he very often gets the *Tanicama*, especially when the sickness is getting worse

The more dangerous and critical a disease is, the surer is *Tanicama* to come upon the sick man; and when the disease appears to be past all hopes of a cure, the *Tanicama* influence becomes strongest, and the demons remain in the very neighbourhood of the sick man's house, if not near his bed. The sound of footsteps, of the violent shaking of trees and bushes, sudden loud sounds, as of striking with whips and sticks, and similar other tokens of their presence and of their joy at the expected death, are supposed to be heard around the house. These ominous signs are called *Holman*. It is on this account, that so many demon ceremonies are performed, when a person is sick, from the commencement of the sickness to its termination.

The literal meaning of the word *Tanicama* gives us a key towards the understanding of many of the mysterious and wonderful circumstances connected with this part of our subject, especially when it is taken in connection with the other doctrine of Demonism already alluded to, viz., that, though a demon try his utmost by means of terrible apparitions or by actual seizure to frighten a man and give him the *Tanicama*, which results in sickness, yet the man will seldom get ill, if he do not get frightened.

Among many hundreds of instances of sickness, which we have heard of, as the consequences of *Tanicama*, the following is one, which came within our own knowledge a few years ago; and we give it here, merely to enable the reader to form some idea of the superstitious fears of a Singhalese, and of the strange pranks, which imagination plays with him.

One evening about 8 o'clock, some four years ago, we happened to take a walk to the seashore, which was not very far from our house. It was a bright moonlight night, and the sky was glowing with the brilliancy of thousands of stars. We were accompanied by two men, of whom one was a young man, whose name was *Baba*. The heat was unusually great, so we remained more than an hour on the seabeach on account of the cool sea breeze. The greater part of that hour was taken up by one of our two companions relating ghost stories, to which *Baba*, like every other Singhalese of his

condition was an attentive listener. The road, by which we must return, was a narrow footpath flanked on both sides by thick bushes. Near this path, and about half way between the house and the seashore, was a large *bo* tree situated in an old graveyard, both of which had always had a bad name among the neighbours, as being haunted by demons, who, it was said, had on diverse occasions frightened many people even in broad daylight. In returning, we had of course to pass this tree and had hardly passed it ten paces, when Baba, giving one of those terrible fierce shrieks of despair and fear, which can hardly be described, threw his arms round the other man, trembling and panting in the most remarkable manner, and the next moment he dropped down senseless on the ground, perspiring most profusely. The other man, who was himself only a few degrees this side of the limits of a fainting fit, managed however to take up the terrified Baba and carry him home. Baba's father and mother having come, a Cattadiya was sent for; in the mean time one of the neighbours pronounced some incantations and the *pirit* charm over the sick man, who in a little while regained his senses. When the Cattadiya came, more charms were pronounced in an inaudible voice, at the conclusion of which some knots were made in the hair of the sick man's head, and some charmed cocoanut oil was rubbed on his forehead, temples, breast, nails, and on the crown of the head. He was then removed to his own house, accompanied by the Cattadiya and his friends.

When Baba was afterwards asked what had frightened him so much, he said that, as he was coming along behind us, he heard, near the large tree, a sort of growl, like that of a fierce dog muzzled, and on looking in the direction he saw a large head peering over a bush from behind the trunk of the large tree.

The morning after this occurrence, Baba was reported to be very ill. In the afternoon we saw him, and found him suffering from a raging delirious fever. Two days afterwards, the ceremony of *Sanni Yakum Neteema* or the *Dance of the Sanni demons* was performed, during which, about 3 or 4 o'clock in the morning, when

the offerings were being dedicated to the demon *Sanni Yakseya*, the sick man exclaimed, pointing to one of the *Tatu* or altars, "*there, there, that is the person, whom I saw near the large tree the other day—there he is eating the rice;*"\* the next minute he added, "*there now he is going away.*" Of course the eyes of all were turned in that direction, but there was nobody to be seen. The next day the man was better, and three days afterwards perfectly well.

Now in this case, it is plain, that either the man's own imagination, which must have been in a state of very great excitement, as he was passing the tree, conjured up to his sight the semblance of a demon, or that some one wishing to pass off a joke, had concealed himself behind the tree and shewed himself in the manner mentioned above. Of these two, the latter is not very probable, as few Singhalese have the courage to remain after sunset in a place supposed to be haunted; that the former is more probably the truth, is apparent from the fact, that the man recovered from his illness soon after the performance of that particular ceremony, which was believed by him, as well as by all demon-worshippers, to be an effectual remedy for diseases brought on by circumstances like those in his case. That the man's imagination was during all the time in a state of high and morbid excitement, is further proved by his pointing out, during the course of the subsequent ceremony, what he considered to be the demon that had appeared to him near the tree.

---

\* The rice alluded to is that which is served out on the *Tatu* as an offering to the demons.

## CHAPTER IV.

## SPELLS OR CHARMS IN GENERAL.

In every demon ceremony, which is performed either to cure or inflict sickness, or to protect a person from becoming liable to any "demon sickness" at all, the effective agents, which influence the demons, and, through them, the disease, are CHARMS or spells, Invocations, and *Dolla* or offerings, especially the first with or without the two last. Like the sciences and the Literature of the Singhalese (with the exception of their Elu poetry), charms were originally introduced from the neighbouring continent. India, in those remote times, was to Ceylon and other neighbouring countries, what Greece was a little later to the rest of Europe. Wijeyo from India colonized it in the sixth century before Christ, and the literature and sciences of the Vedas naturally came with him, or soon after, until they were partly, but not wholly, superseded, two centuries afterwards by Buddhism and its literature. But Demonism had taken so strong a hold of the popular mind long before the time of Wijeyo, that nothing could displace it, and when any accessions were offered to it in subsequent times in the form of new charms and demons, it seems to have incorporated them with avidity into its old system.

Almost every charm begins with the words *Ohng Hreeng*, which, in Sanscrit, are an invocation to the Hindoo Trinity. The Cattadiyis of this country, who are not worshippers of that Trinity, not understanding the purport of the words, but attributing to them some mysterious magical properties, have, in a great many instances, prefixed those words to Singhalese charms, in which the virtues and omnipotence of Buddha are described in a very grandiloquent style, to the exclusion of those of the Hindoo triad. Sometimes however the names of Brahma, Vishnu, Siva and other Hindoo deities are found mixed with those of Buddha and other Buddhist divinities in irretrievable confusion in the same charm. Almost every charm, whether Singhalese, Sanscrit, or Tamil, ends with

the word *Eswah*, which is a corruption of the Sanscrit term *Swaha*, corresponding in meaning to *Amen*.\*

The Charms or *Mantra*, as they are called, are generally in Sanscrit, Tamil, or Singhalese, but a few are written in other languages, such as Arabic, Persian, Telugu, Malayalim, Bengali, and others. Sometimes in one charm a mixture of many of these languages is used. Sometimes no language seems to have been used. In this last case, instead of any intelligible language, there seems to be a collection of barbarous sounds without meaning. Whether this is the *Paisachi*, which Colebrooke represents the Hindoo dramatists making their demons speak on the stage, we are not able to say.† It is however probable, that much of what now seems to be no better than gibberish may at one time have been an intelligible language, which, through its transmission from one illiterate Cattadiya to another, through being transcribed from one Ola into another by men not well acquainted even with their own language, and from the peculiar pronunciation used in the recitation of a charm, may have become so far distorted and changed from what it was, as to be reduced to its present condition. We fear we cannot give any correct idea of this peculiar pronunciation; it consists in a very rapid utterance, in which guttural and nasal sounds principally predominate, rendering for the moment even the plainest of Singhalese charms quite an unintelligible jargon; and to aggravate the evil still more, the recitation of a charm is *generally* performed in a low under tone of voice, scarcely audible to any one.‡

---

\* *Swaha* is also a term, indicative of a certain *Fire-Offering* made to the god of fire, alluded to in Sanscrit works. The wife of the god of fire is called *Swahache Hoctabukpria* — *Amara Cosa*.

† Asiatic Researches Vol. VII. p. 199. quoted also by Turner, in his Introduction to the *Mahawanso*.

‡ One of the most remarkable facts, connected with Sorcery or Magic, is, that in all countries and ages of the world, where the Black Arts have ever been cultivated, the incantations to evil spirits have always been pronounced in a low muttering voice, as is still the practice both here, and in continental Asia and Africa.

The virtue and efficacy of a charm however consist, it is said, not so much in the meaning of the language used, as in a peculiar arrangement and combination of certain letters, each having its own peculiar power. According to this classification, some letters are called *poisonous*, others *deadly*, a third class *fiery*, a fourth *quarrelsome*, and a fifth *causing banishment*. On the other hand there are others called *prosperous*, some *pleasure-giving*, a third and a fourth class *health-giving* and *friendly*, and a fifth *divine*; while a few are called *neutral*. Then again, these letters, when arranged and combined in a certain order, have different virtues—virtues much stronger, than those of single letters. Each of these combinations of letters is sacred to a certain demon, for whom it has an unaccountable, mysterious, and irresistible fascination, from which he cannot free himself. The mysterious virtues of all these combined characters in a charm, are sufficient to overpower and enslave the most powerful demons to the will of the Cattadiya. To make a charm still more irresistible, flattery and entreaties are employed, or the terrible power of king Wessamonny is invoked, or the omnipotence of Buddha, and all set off in language the most horrible\* to the ears of a demon-worshipper.

Native authors maintain that Brahma himself was the original author of charms, but that the science, as they call it, was afterwards amplified and improved by nine Irshis or learned pundits, who lived in India some thousands of years ago. It is divided into eight different parts called *Carma* or acts, according to the different character of the subjects it treats of. These are 1, *Mohana* or the power of inducing swoons; 2, *Stambana* or illicit sexual intercourse; 3, *Otchatana* or the expulsion of demons; 4, *Aakarsana* or compelling the attendance of demons; 5, *Wibeysana*

---

\* The most prominent feature in the language of Singhalese charms is an endless repetition of such terms as *red blood*, *heart's blood*, *eat his lungs*, *graves*, *corpses*, *living corpses*, *suck his blood*, *tear open his heart*, *suck the marrow*, *a cloth dipped in blood*, *eat his heart*, *break his neck and suck the blood*, and many others, which have a very appalling effect on the timid, superstitious mind of a demon-worshipper.



or destruction by discord; 6, *Marana* or causing death; 7, *Tambanaya* or power of imprisoning; and 8, *Paysana* or power of curing diseases. To each of these acts are assigned certain seasons, days, and hours, in which alone anything relative to it can be performed with any hopes of success. Thus, *Wibaysana* must be performed during the eight hours elapsing between 6 P. M. and 2 A. M. at night, during the season called *Wasanta*; *Otchatana*, during the ten days intervening between the 10th and 20th day of the season called *Gunhana*; *Marana*, in the season *Wassana*, from the 20th day of the month, which commences that season, to the 10th day of the next month; *Aakarsana*, during the season *Sasat*; *Stambana*, from the 10th to the 20th day of the season *Haymanta*; *Mohana*, from the 20th day of the month, which commences the season *Sisira*, to the 10th of that which closes it; and *Paysana* and *Tambana*, during every part of the year.\*

It is believed that there are, or at least there were, in this Island 240,000 different charms or spells of every kind, belonging to the art of Necromancy. An old legend says, that once upon a time, long before the landing of king Wijeyo upon these Coasts, one of the kings of this Island, wishing to marry from a royal family, proceeded to Ayodhia pura (Oude) and being introduced to the royal family of that country on the continent, was permitted to select for his queen one out of the seven daughters of the king. Upon this, being anxious to ascertain what their accomplishments were, he asked each of them, what she was most skilled in. One replied that she was skilled in the magical arts of sickening and killing people by means of *Hooniyan* charms; another replied, that she could bring immediate death on any one by means of *Pilli* charms; a third said that she could injure men

---

\* Although there is not much difference of seasons in this Island, yet Singhalese writers have divided the year into six seasons. viz. 1. *Wasanta* which corresponds to April and May; 2, *Gimhana* [hot] which, corresponds to June and July; 3, *Wassana* [rainy] to August and September; 4 *Sarat* [dry] to October and November; 5, *Haymanta* [dewy] to December and January; and 6, *Sisira* [cool] to February and March.

by *Angam* charms; three others also replied in the same way, mentioning some particular department of Sorcery, in which they were most skilled, and by which they could bring diverse calamities on men; but the seventh and last princess said that she knew none of those in which her sisters were accomplished, but that she was well learned in the other class of charms, by which she could restore to health and life men suffering from the former. Upon this, the King of Ceylon, being highly pleased with her, selected her to be his Queen, and brought her away to his country. The other sisters being offended at this as an insult offered to them, determined to take their revenge. For this purpose they collected from all parts of the world every kind of charm, that was productive of evil to man, and inserting them in some peculiar manner in a pumpkin\* sent it to their sister in Ceylon, as a present. Their object was to destroy their sister and her kingdom by its means, for on being touched by the hand of the person, for whom it was intended, it was to set on fire both that person and everything else within a hundred *Yoduns*.† But while the man, who carried it, was on the sea on his way to the Island, it set fire to his head, and then fell into the sea, from which it was afterwards picked up by a certain god, and presented to the King of Ceylon. These evil spells together with the charms in the healing department, which his own Queen knew, constitute the 240,000 alluded to above. Whatever particle of truth there may be in the story, it is certain that a majority of the charms now in use among the Singhalese were introduced in times much later, than those indicated by this legend.

---

\* The pumpkin was selected for this purpose, because nothing else in the whole universe could hold such dangerous materials without being immediately burned to ashes! In the Ceremony of *Hooniyan Kerema*, by which all evil influences produced by any malignant charms are sought to be removed, a pumpkin is placed before the sick man, and after ordering, by means of incantations, all such evil influences to "descend to the pumpkin," the Cattadiya cuts the fruit in two, and then throws it into the sea or some other place of water.

† A *Yoduna* is 16 miles.

Though a charm be ever so good in the number and proper disposition of those peculiar combinations of letters we have already mentioned, and though it be complete in all other respects, yet it can have no power for any practical purpose, unless it be subjected to a certain process or ceremony called **JEEWAMA**, which literally means, "the endowing with life." This it is, that makes a charm efficacious for good or for evil. A Jeewama is considered to be a ceremony of greater or less difficulty and danger, according as the object of the charm is considered to be more or less easy of accomplishment. For instance, the Jeewama of a charm to cure a gripe or a headache is attended with no danger, whilst that of another, intended to cause the death of a person or to seduce the affections of a girl, is supposed to be fraught with great danger to the life of him, who performs the ceremony. This danger arises from demons, who endeavour to prevent in various ways the accomplishment of the man's object. For, should the charm be perfected by the uninterrupted progress of the Jeewama, the demon would be bound, nolens volens, to accomplish the object aimed at by the charm. Hence their anxiety to interrupt a Jeewama, and to frighten away those engaged in it; the consequences of that fright to the men, being sickness and death.

When a Cattadiya is asked why it is that he cannot now do any of those wonderful things, which his predecessors of earlier days are said to have done, and which his omnipotent charms profess to be able at any time to effect, his answer is invariably an argument founded on this danger and difficulty of the Jeewama ceremony.

Every charm has a sort of rubric appended to it, in which the object of the charm\* is stated, and instructions are given in what

---

\* Some people have been so anxious to prevent others from making use of any of those "tried" [Singhalese *Atduta*] charms, in whose efficacy they have the firmest belief, that they have managed to render their own manuscript copies mere sealed books to the rest of the world, by writing the rubric in a way unintelligible to those not initiated into the mystery. For this purpose, they

place and manner the Jeewama is to be performed, together with a list of the offerings required on the occasion.

The Jeewama of some charms is as follows.—The Cattadiya, or whoever has undertaken the task,\* repairs to a grave at one of the Yamas, and prepares what is called a *Mal Bulat tatuwa* or *table of flowers and betel leaves*; this is a chair or something similar, with a piece of white † cloth or a green plantain leaf spread on it; on this cloth or leaf must be placed nine different kinds of flowers, a few of each kind, the yellow flowers of the Areca and the red flowers of a small shrub called *Rat Mal* being generally of the number. With these is mixed some sandal wood powdered fine and mixed with water; sometimes a few betel leaves, ‡ with a copper coin, are added. The whole of this is called *Mal Bulat tatuwa*. On this table is placed a thread or thin string called *Kan-ya Nool* or *Virgin Thread*, so called from its having been spun by a virgin from native cotton. || This thread is coloured

---

generally use a language like that, which Reynolds describes in his *Pickwick Abroad* and *Mysteries of London* as used by the abandoned desperados of London.

\* Excepting in regular ceremonies, which are performed to cure a disease, persons other than professional Cattadiyas often engage in minor matters of the Art, such for instance as the “trying” of a single charm, unless its Jeewama be considered to be one attended with danger.

† *White* has been the emblem of purity among all nations and in all ages of the world.

‡ These betel leaves must be taken from a plant, from which none have been previously removed by men for the purpose of chewing.

|| *Kan-ya Nool* threads are used in almost every Demon ceremony, but, what particular virtue they have, or what mysterious relation they bear to demons, I have never been able to ascertain. There are certain rules which are to be observed by the girl in the spinning of this thread; but they are never strictly observed now a days, lest a strict adherence to them may make her liable to Tanicama or some other similar calamity. By these rules the girl must first wash herself, and then putting around her neck a necklace of *Rat mal* flowers, with her hair thrown loose on her shoulders, she must sit on the threshold of the door of her house, looking towards the setting sun about 6 P. M., and then spin the mysterious thread.

yellow by rubbing it with a piece of saffron.\* Another table called *Pidayni tatuwa* or *Offering altar* is then made, with the green sticks of a shrub called *Gurulla* or *Burulla* for its legs, and is covered with the inner white bark of the plantain tree, and the broad green leaves of the *Haburu* plant.† On this altar are placed *Etta Etty* or *Seeds*, being five different kinds of seeds roasted well on a fire, the *Hat Malu*, or *Seven Curries*, consisting of vegetables, fish, and flesh of land animals, and a little boiled rice.‡ A fire

\* *Saffron* is an article used both in the rites of Demonism and in those of Capuism. In the latter, the offerings, which consist principally of money and images of silver, must be rubbed over with saffron, and then wrapped up in a piece of a saffron leaf, before they are placed on the altar. A quantity of water held in a species of jug called *Cotalay* is also coloured and perfumed with saffron; this water is thrown by the Capua on the persons of the devotees as Holy Water.

† *Haburu* is a sort of potatoe, cultivated in the dwelling gardens of most of the poorer classes of the Singhalese. It also sometimes grows wild. It has no stem nor branches. The leaves are heart-shaped and very large, sometimes measuring 5 feet by 4. The root is large, being sometimes about a foot in diameter, and three or four in length, perfectly cylindrical and of uniform thickness from one end to the other; if the plant be allowed to grow long, this root becomes a sort of stem rising to a height of four or five feet from the ground, with a crown of five or six leaves on its summit. This stem (when there is one), and the root are used by the people for food. It produces a sharp, biting sensation, when taken into the mouth, so much so indeed, that it is with great difficulty that it is swallowed. Some kinds however, which have been carefully cultivated, do not possess this unpleasant quality in any great degree, and some are almost entirely free from it. It is recommended by native doctors as a very valuable medicine to those subject to piles. There are several species of *Haburu*, most of which are used as food. One or two kinds are especially prized for making Curries. *Cohila Cola* is one of the most favourite dishes of a Singhalese, and it belongs to this genus. Its medicinal properties too are considered to be very great. A medicine called *Cohila Patmay* is prepared from it for those suffering from piles, and we have reason to believe in its efficacy.

‡ For fish, a piece of dry fish, and for flesh, a piece of skin from an old leather sandal are generally substituted for the sake of convenience. The rice directed to be used on this occasion is the kind called *El Sai* or Hill Rice,

is then made on the grave, with *Pas Pengiri dara* or the wood of five different kinds of trees, the fruit of which is sour to the taste, such as orange trees, lime trees, citron trees, and others of that kind. On this fire is placed an earthen pot containing an egg, and a gentle fire is kept up, till the egg is completely boiled. While this boiling is going on, the Cattadiya lies down on the grave at full length on his back, and pronounces his charm in a low tone a certain number of times, 3, 7, 9, 16, 48, 49, 108, 128, or 133 times, and in some cases so many as 1000 times, each time taking care to throw a small quantity of powdered resin into a pot containing some hot live cinders.\* The resin produces a strong-scented thick smoke, with which the Malbulat Tatuwa and the Pidayni Tatuwa are performed. This is done generally as many times as the charm is recited. He then sits up on the grave, and taking into his hand a cock pronounces over it another charm. Next he takes the Kan-ya Nool thread, and, pronouncing a charm over it, makes a knot in it. The charm is recited several times over the thread, and each time a knot is made in it, the firepot being kept smoking, with resin under the thread. Sometimes all this has to be repeated at two succeeding Yamas, after which the charm is considered to be complete. The whole of this ceremony is called *Jeewama*. The charmed thread is brought away, and used for the purpose, and in the way, directed: for instance, if the object be to cure sickness, the thread is tied round the arm, or the neck, or the waist of the sick person; if the charmed substance be not a thread, but something else, as a betel leaf, and if the object of the charm be to gain the affections of a woman, the betel leaf is given to her through some proper agent.

The above is only a general description of a Jeewama ceremony. For each charm has its own particular Jeewama, differing from all

---

which is considered to be the best; yet in point of practice rice of any kind is used.

\* The firepot or the Chafing dish is mentioned by Lane in his *Modern Egyptians*, and seems to be as much in demand among the sorcerers of Egypt, as among the Cattadiyas of Ceylon.

others both in the offerings it requires, and in the time, place, and manner of its performance. However the Kan-ya Nool, altars, flowers, and the smoking firepot, are always required; and graves, generally.

An ordinary *Aaraksa Nool*, that is a charmed thread worn about the person as an amulet against Tanicama, requires no greater Jeewama ceremony than this—the Cattadiya having gone to the back of the house with a Kan-ya Nool, some live cinders in a cocoanut shell or a tile, and a little saffron and resin, pronounces his charm in the usual low muttering tone, all the while perfuming the thread with the resin smoke, and making a few knots in it, equal sometimes to the number of times he pronounces the charm. All this does not take up more than 30 or 40 minutes. But in certain other Jeewamas, such as those relating to many kinds of *Hooniyan* and *Pilli*, whose object is the destruction of some person, these things are done on a greater scale, and are said to be attended with great danger to the lives of those engaged in them.

The danger, it is said, consists in this,—When the Cattadiya is going on with his incantation, but particularly about its conclusion when the virtues of the charm are becoming perfected, demons begin to arrive on the spot, one after another, generally in the disguise of beasts and serpents, such as monkeys, black dogs, elephants, tigers, Cobra-de-Capellos, polongas, and sometimes in the shape of old wrinkled grey headed men and women, with the exception of the last demon who appears like a man. Each of these, as he arrives, must be presented with the particular offering appointed for him, such as an egg, a fowl, some boiled rice, a young king-cocoanut, a few drops of blood, or something else as directed in the charm itself; any mistake or delay in presenting the offering being followed by immediate death or incurable sickness to those engaged in the ceremony. The demons, when they approach the scene, do all they can to frighten away the men, either by felling large trees near the spot, or by surrounding the men with a ring of burning jungle, or by creating a thick darkness, such as Milton speaks of in his *Paradise Lost*, or by uttering loud screams and

howls like the roaring of thunder. All this the demons are said to do, in order to prevent the success of the charm: for if the virtues of the charm were to be perfected by the Jeewama, the demons would be spell-bound to act like slaves in effecting that, which the charm is intended for. Hence their anxiety and efforts to frustrate its success. These efforts, it is said, have generally been successful, and many a story is related of men found lying dead on the scene of a Jeewama, and of others, who lived raving maniacs for the rest of their lives, or who died a few days after their attempt to perform the ceremonies, from a delirious fever which no medicine or demon ceremony could cure.

Charms, it is said, do not retain their virtues beyond a certain period; some retaining them only 50 years, while others retain them 100, 300, 700, 900, 1000, 1900, 2700, or 3300 years. Those few alone, of which Brahma himself was the author, retain their efficacy for ever. Besides, the loss of a single letter which belongs to a charm, or the addition of one which does not, or any other alteration, though the smallest possible, is supposed to affect it equally; in this latter case, however, there is said to be a certain method of revising the charm and of restoring its original reading by means of a certain magic table called *Siddhi Chakkray*.

The principal works on the subject of charms are *Narayana*, *Mayrutantria*, *Mantra chinta Mania*, and *Mantra Kakse*, which are all in Sanscrit. Less important works treating both of Demon ceremonies and of charms in general, are *Mantra Mala Teeka*, *Sanka pala Widia*, *Cola Widia*, *Bahirawa Widia*, *Bahirawa Calpe*, *Cuhara Widia*, *Sagal Asna*, *Cumara Widia*, and *Asura Widia*, which are partly in Singhalese and partly in Sanscrit. There are many Cattadiyas now living, who have more or less studied these works, and are celebrated among their countrymen for their professional attainments, among others *Caduru Pokuna*, and *Dandawe Ganitaya* and *Ratuwatte Cattadiya* in the district of Suffragam.

We have translated a few charms for the amusement of the reader; and in doing so, we have selected those, which would be



most intelligible. The following is one which is intended to drive a man mad—

“Oh Brahma, Vishnu and Siva! I make my adoration to you! Oh, come thou, Hanumana! Oh, come, thou god, Hamuanta! Oh, come thou, Madana! Oh, come, thou goddess, Madana! Come thou, Baddracali! Come, thou goddess, Baddracali! Come thou, Curumbara! Come, thou god, Curumbara! Oh, come thou, Maha Sohona! Oh, come, thou god, Maha Sohona! Come thou, Gopolla! Come, thou god, Gopolla! Come thou, Reeri! Come, thou god, Reeri Yakseya! Oh Samayan, come! Oh, come, thou god of Samayan! Come thou, Wata Cumara! Come, thou god, Wata Cumara! Oh, come thou, Calu Yakseya! Come, thou god, Calu Yakseya! Oh Vishnu, come thou! Oh Vishnu's Avatar, come! Come thou, Ayiyanayaka! Come, thou god, Ayiya-nay-ka! Come from on high! Come from below! Come from all directions! Come from all parts of the universe! Come, all the dewo and all the dewatawas! \* Come, all ye demons! Come, all ye demon chiefs! Come, thundering from the sky! Come, making the earth tremble as ye come! Ye demons Encadawara and Malcadawara, all ye dewo and dewatawas, ye male demons and female demons, look at this human being from head to toe! Look at his bones, his sinews, his joints, his neck, his blood, his lungs, his heart and his intestines of 32 cubits in length. Look, look at them! And Oh! receive this human being, as a sacrifice unto you! Take him for yourself! Take him! I dedicate him to you. I dedicate him to you. I dedicate him to you with his dum-mala † incense. Look at him and accept him. Let this be so.”

---

\* *Dewo* are the gods; *Dewatawas* are the inferior classes of gods and the superior classes of demons. But the Cattadiyas often carelessly apply the latter term to inferior demons too. In charms however, flattery being one of the means of drawing the attention of a demon, no distinction is observed in the application of these terms, as is obvious from the above charm.

† The incense offered to demons by the Sorcerers of this country is not frankincense and myrrh, as elsewhere in the East, but a species of very inflammable resin called *dummala*, which is obtained from the ground a few feet

Then come the directions for performing the Jeewama, which are as follow—"Make a Mal Bulat Tatuwa and three Pidayni Tatuwas on a grave. Use the Etta Etty, the Seven Curries, blood, boiled rice, opium, three lizard eggs, a cock, seven clusters of Rat Mal flowers, the ashes of burnt hair, and roasted meat for these altars. Make an image of wax, and write on it the name of the person, who is to be injured. Take then seven Kan-ya Nool threads, and pronouncing the charm 108 times, make seven knots in the threads, one in each. Put the image on an Areca flower, the first, which that tree has ever produced, and tie them up together by means of the threads. Then take this away and conceal it in the back roof of the house. The man will be insane from that day. To cure him, remove the image from the roof and throw it into a stream, and the man will recover his reason."

The following is a charm for curing any disease supposed to be caused by the demon Reeri Yakseya:—

"Brahma, Vishnu, and Siva! Adoration be to you! The demon Reeri Yakseya, who resides on the rock Mala Dola Gigrana in the land of Sayurasla, came into this world from the womb of his mother Laytali by tearing himself through her heart, on Saturday in the month of Nawan, [corresponding to a part of February and part of March.] This demon wears a crown of fire on his head, a cloth of blood below his waist, and another cloth of blood above, thrown across his shoulders. He has the face of a

---

below the surface, and also from certain trees, which produce gums equally inflammable and also called dummala, of which the *Sal* tree is the principal.

The Ola books of the Singhalese being written with an iron stile, the characters are illegible, but by rubbing on them an oil extracted from dummala, mixed with the ashes of burnt rags, a black colour is imparted to the lines, and so the letters become very legible.

The practice of offering incense to beings considered to be superior to men, whether they are called gods or demons, is one which appears to have prevailed from the earliest times, and its origin would indeed be a very interesting subject of inquiry both in connection with the history of Ceylon Demonism, and in relation to the Jews, with whom it was usual to make an incense offering to Jehovah.

monkey; his feet are of a bloodred colour, and the rest of his person of a golden hue. He brandishes in one hand the Bludgeon, and in the other the Trap of death, by whose apparition he is attended. When he received his wurrun from Iswara, Sekkra, and Brahma, he repaired to a place where three roads met, and standing there, and licking at the same time two pieces of human bones, which he carried in his mouth, his whole person dripping with blood, he clapped his hands and bawled out so dreadful a cry of triumph and defiance, that even the gods of ten thousand worlds were struck with terror and dismay. When the four guardian gods of the world asked, if there was not any one in the universe powerful enough to subdue the demon, they were told that neither Iswara,\* nor Brahma, nor Natha, nor Gandharwas, nor Garundas, nor Saman, nor any Sorcerer could do it. Upon this, the great, the glorious, the wonderful Vishnu took a jungle creeper, which grew on the Rock of Blood in Sayurasla Desey, which is situated beyond seven seas and pronounced over it this charm—Oh Brahma, Oh Siva, Oh Vishnu, Oh Walia, come! Come thou, Hanumanta! Come, all ye gods! Come, all ye demons! Come instantly! I bind, I bind. I confine, I confine. Be bound, be bound. Be confined, be confined. Let this be so. By pronouncing these words he bound and subdued the demon Reeri Yakseya. Therefore by the power of Vishnu, and the overthrow he gave thee that day, I compel thee, oh demon Reeri Yakseya, to be bound by my charm. I bind thee. Be thou bound, bound, bound.† I order thee to heal at once this disease, which thou hast brought on this human being. Let this be so.

“This charm is to be pronounced over a thread‡ or some oil,|| afterwards the oil must be rubbed over the person, or the thread must be tied round his arm; and the patient will recover from that instant.”

---

\* *Iswara*, I believe, is another name of Siva.

† This repetition of the same word is characteristic of most charms, especially in that part in which its virtues are supposed to be concentrated.

‡ Whenever *threads* are mentioned in charms or in any thing else relating to Demonism, Kan-ya Nool threads are meant.

|| When *oil* simply is mentioned, it is to be understood of cocoanut oil. But

The following is a charm for curing headache. It is to be pronounced over a little oil, which must be stirred incessantly with a piece of iron all the time that the charm is being pronounced.

"Oh Brahma, Vishnu, and Siva! I make my adoration to you! When Ginires dewatawi (she demon of fire), who resides in Ginires Coville (temple of fire), in the country of Ginires Daysa (land of fire), complained to Mangra Dewiyo of the fire which was burning in her head, he (Mangra Dewiyo) sent for milk from the breasts of the Seven Mothers of milk,\* and with it put out the fire which was burning in her head; for which he had received Wurrun from sixty-four different persons. By the power he exercised that day, I do this day command that the headache, which troubles this person, do quit him instantly—do flee, flee this moment."

Although by far the largest majority of charms are either for inflicting or for curing diseases, yet there are many others for various other purposes, and in fact there can hardly be a wish of any kind, be it good or bad, which may not be gratified by charms. Among others, the following is one for inducing demons to throw stones into dwelling houses, so incessantly and so long, as to compel the inmates to desert the house.

"Oh Brahma, Vishnu, and Siva! Adoration be to you! The she-demon Calu Cambanee, who influenced the bile, the she-demon Narasingha, who influenced the wind, and the she-demon Sen

---

in some cases when it is expressly mentioned, a composition of several kinds of oil, called *Pas Tel* or the Five oils, is used. These five oils generally are Cocoanut oil, Gingelli oil, *Cohomba* oil, *Mee* oil, and Castor oil.

\* There is a certain Dana or Almsgiving ceremony called *Kiri Ammawarunnay Dana* or the Alms of the Mothers of Milk, generally observed three months after the birth of a child. Besides other people, who are invited to the house to partake of food or Dana on the occasion, seven women, sometimes seven unmarried girls, named for the time *Kiri ammala* or Mothers of Milk, are made to sit apart from the others, and are treated to a breakfast of boiled rice, plantains, and a sort of jelly called "Milk," made of rice flour, jaggery or country sugar, and the juice of the cocoanut. The dishes of the others, who are treated on the same occasion, are different from these.

K

Cumari, who influenced the phlegm, in the disease, which afflicted the four great demons, who were the offspring of the great king Carma; the demon Sanni Yakseya, who influenced all the three, the Bile, the Wind, and the Phlegm; the demons, who produce disease by means of the Evil Eye and the Evil Mouth; and the demons and she-demons Takaree, Makaree, Kalaraksee, Yamadoo-tee, Ailakkandi, Mailakkandi, Nanaroopee, Telokadewi, and Oddy Curumbara, these demons and she-demons, who afflict man with 98 diseases, and 99 infirmities, and subject him to the risks of 203 dangers, all you male and female demons, I bind you first by the power of the god Loka Natha; secondly, I bind you by the power of the glorious god Vishnu; thirdly, I bind you by the power of the worldfamous goddess Pattini; fourthly, I bind you by the power of the god Saman; fifthly, I bind you by the power of the god Dewol; sixthly, I bind you by the power of the god Canda Cumara; seventhly, I bind you by the power of Andungini Dewatawa; eighthly, I bind you by the power of King Wissamonny himself; ninthly, I bind you by the power of the Graha gods (the Planet gods); tenthly, I bind you by the power of the eight Guardian gods, who are in charge of the eight points of the sky. I bind you all. I bind you all by the power of all these gods. I do this by the same power which the great Prades Rusia\* used. Do, as I do. Stay, where I tell you to stay. Go, where I tell you to go. Eat, burn, destroy, when I command you to eat, burn, and destroy. Let this be so."

The Jeewama of the above—"Put a Champica flower, a flower of the iron wood tree, and a stone on a Mal Bulat Tatuwa, placed on a grave, or at the point of junction of three roads, or near a tree, whose bark has a great deal of sap in it. Then place around the Mal Bulat Tatuwa a little blood, a little milk, a few flowers, and some *porri*,† each kind in a separate leaf. Then put up lights all round; having done this take some resin, and pronounce over it the

---

\* Prades Rusia was the first man, who followed the profession of a Cattadiya-

† *Paddy*, as rice in the husk is called here, being put into a vessel and heated over a fire, splits open into large white flakes, which are called *porri*.

charm (not the above but the one used for consecrating resin), and hold up the smoking fire-pot to the *Mal Bulat Tatuwa*. Next, pronounce the above charm 108 times. Do this at three several *Yamas*. Lastly, take away the stone, and bury it in the ground under the stile of the garden fence, or at the back of the house. Then throw a stone at the house; and from that day, that house will be pelted with stones. To put a stop to the pelting remove the buried stone, and throw it into a stream or some other place of water, and the stone-pelting will cease from that day."

Charms may be divided into two great classes, viz., 1st—Those intended to inflict death, disease, or some other inconvenience upon men; 2nd—Those intended to counteract the first, and remove their evil consequences. Under the head of the first class come several departments of charms, chiefly *HOONIYAN*, *ANGAM*, and *PILLI* charms; under the second, *BANDANA*, *DEHENA* and a few others. These will be treated of in the succeeding chapter.

---

## CHAPTER V.

## HOONIYAN CHARMS.

CODIWINA or HOONIYAN is the name given to evils of whatever kind inflicted by the agency of charms. Hence the charms which cause these have been denominated Hooniyan charms. There are said to be 84000 of these, of every degree of malignity, most of which more or less contribute to bring to an untimely death the man affected by their influence, though that event may be deferred for many years. Some Hooniyan charms have the effect of filling a house or garden with so many demons, that the owner finds it difficult to pass even a single night in the house, but if he take heart to do so, it is most probable that he and his family will fall sick, one after another, as if attacked by some contagious disease: others frighten him by hideous night dreams, or by sudden apparitions, even in broad daylight, of large black dogs trying to bite him, or of ugly monkeys grinning at him,\* but who vanish the next moment from his sight.

Whatever may be the nature of the disease brought on a man by Hooniyan charms, that disease always resists every attempt to cure it by medicine, and invariably results in the death of the man, unless other remedies be applied in time, viz., those which charms alone afford. For although there are gods and god-worship (*capuism*), and Buddhistical *Pirit* and *Pirit Nool*,† that hold out to their votaries every protection against demons, and although these gods are beings immeasurably superior to the demons in power,

---

\* These superstitions about demons assuming the disguise of monkeys to frighten men seems to have been current in the time of Shakespeare.

*Caliban*—"His spirits hear me....."

"Sometimes like apes, that mow and chatter at me—

*Tempest* Act II. Scene II.

† *Pirit* is a certain Buddhist ceremony performed for the purpose of removing all sorts of demon influence; and *Pirit Nool* is a thread consecrated by that ceremony, and used as an amulet for the same purpose.

yet if a demon bring his malign influence to bear upon a man through the agency of Hooniyan charms, no power on earth below or in the sky above can save him, unless he resort to the very art, which in the hands of his enemies has injured him so much. Generally, if a man often gets sick, especially from rheumatic attacks, and if he frequently feels thirst accompanied by an unusual degree of heat in the blood, especially about the region of the chest, he will attribute it to Hooniyan charms and more so, if he recollects that he has an enemy in one of his neighbours: and even though he has no enemy, yet if his sickness seems to resist the skill of his physician, and if a burning sensation in his body is one effect of his sickness, and if he is often troubled by dreams in which black dogs, monkeys, and horrible looking men try to frighten him, he is sure that his sickness is a Hooniyan. If a man in climbing a tree, or in moving from the top of one tree to that of another on the ropes which connect them together (as is the case with cocoanut trees during the season of distilling Arrack), makes a false step and is thereby precipitated to the ground whereby he dies, the probability is that the calamity will be attributed to a Hooniyan\*: and this probability will not be the less strong, because the man may sometimes happen to escape with only a few bruises and fractures; but it will, on the contrary, be much more strengthened by what the man himself relates, which generally amounts to this—that, while he was on the tree, he was thrown down by somebody whom however he did not see, or that he was frightened by some monstrous-looking being, which appeared and disappeared with the rapidity of lightning, or that he suddenly and most unaccountably felt giddy and faint and so lost his footing and fell; all which to the

---

\* About twelve months ago, there was a lawsuit between one of our friends and another man, so they were not on the very best of terms with each other. Before the case was decided, the other man happened to fall from a cocoanut tree and died instantly. It was therefore imputed to a Hooniyan charm practised by our friend. And the two families are now at deadly enmity with each other.



minds of his friends are so many proofs of a Hooniyan cause, although some unfriendly wag of a neighbour might insinuate that the man was tipsy with Toddy rather than affected by a Hooniyan cause at the time. Suppose a man and his wife constantly quarrel and do not like each other's company, especially at the commencement of their matrimonial life, and neither of them can assign any adequate reason for it, then, although the man's friends will say that the woman is wholly to be blamed, and the woman's friends that the man is solely to be blamed, it is most probable however that both these sets of friends in their cooler moments will say that a Hooniyan must be the sole cause of this domestic misery. A young woman is betrothed to a young man, but sometime afterwards the match is broken off through the non-consent, say, of some of the girl's relatives, and she is therefore given in marriage to another young man, and in due course of time she gives birth to a child; if, during the pains of delivery, she suffers much, and is not easily delivered of her burthen, you will then hear but one word whispered in low accents from mouth to mouth among all the relatives and friends assembled there; and that word is Hooniyan. You may see some of these relatives standing in groups of 2 or 3 in the compound or behind the house, engaged in an earnest, anxious, grave, and whispering conversation, others hurrying here and there either in search of a skilful Cattadiya, or in making preparations for performing some special demon ceremony, although similar ceremonies had been performed months before in anticipation of such a calamity, a suspicion of which necessarily arose from the circumstances attending the marriage. Or you may see one Cattadiya, standing near the house, muttering his charms over a small tea-cup containing some cocoanut oil or over a thread; and another standing before the distressed woman, and with an "Arecanut Cutter"\* cutting three limes,† at the

\* An Arecanut Cutter is an instrument, which is found in every Singalese house. As its name implies, it is used for cutting Arecanuts preparatory to their being chewed with betel leaves, chunam, and tobacco.

† The cutting of limes on this, and on every other occasion when it is intend-

same time pronouncing some short charms in a voice a little more audible than usual. And after all, if the woman dies, it only confirms the truth of what they had but surmised at first.

In most Hooniyan charms, a small image made of wax or wood, or a figure drawn upon a leaf or something else, supposed to represent the person intended to be injured, is necessary. A few hairs of his head, some chippings of his finger nails, and a thread or two from a cloth worn by him, and sometimes a handful of sand from a place on which he has left his footprint, are also required, when the image is submitted to the Jeewama, especially in Hooni-yans directed against parties intending to marry. Also *Pas Lo* or *five metals*, that is nails made of a composition of five different kinds of metals, generally gold, silver, copper, tin, and lead, are driven into the image at all those points, which represent the joints, the heart, the head, and other important parts of the body. The name of the intended victim is also marked on the image. After the Jeewama, this image is buried in the ground in some suitable place, such as under the stile of the garden fence, or in some other spot, where the intended victim is likely to "*pass over*"\* it. This "passing over" is essential to the success of a large majority of Hooniyan charms. After this, the image is either left in the same place, or is taken out and secreted in some other place according to the directions in the charm itself. In the case of some Hooni-yans, which however form but a small minority, this "passing over" is not needed at all, as, for instance, in those intended to produce *impotency* in a man.

To ensure greater certainty of success to a Hooniyan charm, other precautions are also sometimes taken, such as ascertaining from the horoscope of the party the particular season or day or

ed as a part of a demon ceremony, is done in a particular manner; the lime is placed between the two blades of the Arecanut Cutter, where it is held firmly by slightly pressing with the fingers the two ends or handle of the "Cutter," while the charm is being pronounced over it. Then, as the last word or syllable of the charm is being pronounced, and before its sound can have time to die away, the fruit is at once cut in two by a single effort.

\* *Panna-wana-wa* is the Singhalese term for this.

hour, in which some planet or planets appear to threaten him with some calamity, and regulating the time of performing the Hooniyan accordingly.

Hooniyan charms are considered to be so powerful, that, even if a person other than the one for whom the charm was intended happen to be the first to "pass over" the buried image, he too is injured in some degree; the diseases produced in such a case being generally sores, boils, and itches on the feet, especially on the soles. A man, who sees a boil on the sole of his foot, and knows that he has not been treading on any jungle thorns, immediately suspects that he must have been "passing over" a buried Hooniyan charm, intended either for himself, or for somebody else; and so the Cat-tadiya and his *Hooniyan kapeema* ceremony are soon put in requisition, together with the assistance of the physician, the Capua, the Astrologer, the Balicaraya, the Buddhist priest and the Sooth-sayer; who, each in his own way, contribute to the desired result; for the creed of a Singhalese is, not to wait for a cure from one source alone, but to avail himself of all within his reach, although the art of Sorcery is positive in its dogma, that an evil caused by that art can be remedied by it alone, and by none other.

The following are the names of a few Hooniyan charms, considered to be unfailing in their effects, together with a brief description of the nature of these effects.

1. *Marulu Pennuma*.—Causes madness—burning heat every where in the body—frequent deprivation of the senses—running into words and streams—shouting, weeping, using violent and abusive language—paroxysms of rage—fainting fits—eventual death.
2. *Dala Reeri Watey*.—Causes the demon to be always in the company of the man, which is a source of perpetual disease of every kind which at last results in death.
3. *Reeri Cuppey*.—Sickness till death—the demon's influence never leaves the man till after death.
4. *Maha Sohon Gini Maruluwa*.—Lays desolate whole villages, depopulating them by sickness or death.

5. *Mayga Patala Oddi Deheney*.—The man vomits blood—falls down senseless—in a short time dies.
6. *Bamba Dristia*.—The demon Reeri Yakseya shews himself to the man in the disguise of Brahma, several times in a day, which leads to sickness and death.
7. *Calu Cumara Murtuwa*.—Swoons and fits of insanity—discharge of blood in the case of females—dancing and uttering *hoo* cries—sudden death.
8. *Sanni Calu Cumara Murtuwa*.—Madness.
9. *Reeri Yak Murtuwa*.—During the wedding procession the bride will become mad, and the demon Reeri Yakseya will at the same time strike the bridegroom's head with his knuckles.
10. *Wada Yak Murtuwa*.—The wife gets mad—demons take possession of the house—sickness and death.
11. *Madena Cumara Murtuwa*.—Madness.
12. *Sanni Daepaney*.—Continual disturbance, noise, and apparitions of demons within the precincts of the family residence—the house becomes uninhabitable, shrieks, screams, and horrible cries are heard frequently at night.
13. *Sohon Gini Bandenay*.—Insanity and delirious fever—rheumatic attacks—pains in all the joints—paralysis—death at the end of three months, if not cured sooner. (*This is intended for married couples.*)
14. *Madena Sohon Bandenay*.—Quarrelling—hating each other—insanity—sores and boils at the joints—paralytic attacks of rheumatism—divers diseases. (*Intended against married couples.*)
15. *Gadewara Iripenneema*.—Madness—running into woods, graveyards, and streams—shouting—dancing—extreme heat in the blood—speedy death.
16. *Golu Keelay*.—Dumbness.
17. *Madena Sangilla Tatuwa*.—Cough and consumption—itching pain over the skin—insanity.

18. *Wandi Banda Jeewama*.—A man cannot remain in his house—he must run away from it.
19. *Ratnimiti Well Penneema*.—Death in seven days.
20. *Wija Paluwa*.—A man forgets all that he knew of any science or art.
21. *Kamuruwa*.—If you pronounce the charm over some water, and sprinkle it on a person's hand, the latter will fall down on the ground.
22. *Reeri Kamuruwa*.—The same effects as the above, with this addition, that the man who falls will bleed through the nose.
23. *Oddi Reeri Dohenay*.—Fever—paralysis—rheumatic pains—sores and boils—death in three years.
24. *Cal-lu Carpuwa*.—Immediate death.
25. *Jala Rama Bandenay*.—Rheumatic attacks—death within three months.

The following is the Hooniyan charm called Cadewara Iripeneema (No. 15 in the above list.)

“Adored be thou, Oh Buddha! The she-demons Cadawara Reeri Yaksenee, Billey Reeri Yaksenee, Calu Candi Yaksenee, Marana Keela Yaksenee, Samayan Cadawara Reeri Yaksenee, and Calu Roopa Yaksenee, who all sprang into being from the blood, which spouted up into the air from the heart of queen Seetapatee of the city Seetapatee Nuvera, once upon a time rushed into Bangala (Bengal) and thence to Nuvera Ellia, where they rested on the rock Gala Tala (Pedro Talla Galla.) Each wore around her neck a garland of flowers, a chain of gold, and a chain of silver. They then sent forth a deadly ball of fire and smoke to Ramapura, and another to prince Rama, by which both that prince and the prince Sumana Disti Cumara were affected with demon-influence. Next they looked down upon the rest of the world of human beings, and took possession of 1000 children, 1000 women, and 1000 men, making these creatures tremble, and cry, and shout, and rave, and die. These she-demons I bind by the power of the king Wissamonny. Let the she-demons Muni Cadawara Reeri Yaksanee,

**Yamacali Yaksenee, Raticami Yaksenee, and Sanni Cami Yaksenee,** come hither. Come instantly. Come, thundering from the sky. Make the sky and the earth roar and reel, as ye come. The she-demons **Cadawara Reeri Yaksenee** and **Muni Billey Yaksenee** with others once went to the city **Capila**, and began to devour the citizens; whereupon the king **Wissamonny** and the king of the gods, binding them with chains of fire and human bones, checked their ferocity and frightened them exceedingly. Therefore by the power of these gods, I command you, oh she-demons, to look here. I command you to come directly to me without looking anywhere else. I bow down to thee, Oh Buddha! The she-demons **Lay Cadawara Yaksenee, Reeri Cadawara Yaksenee, and Aawey Cadawara Yaksenee** once went to the mountain **Nawasiagiri Parwatte**, where they devoured the heads of nine hundred princes, and killed the great prince **Cewulia Cumara**, whose blood they drank. When the son of king **Wijeyo** was playing in his royal father's flower garden, **Aaweysa Cadawara Reeri Yaksenee** struck him with her necklace of flowers, which hurled him many thousand fathoms high into the air. She once went to the rock **Maha Lay Parwatte**, but the great demon chief **Malla** told her to descend to the earth inhabited by men, and to feed on such as she liked. Oh **Aaweysa Cadawara Reeri Yaksenee**, I call upon thee to listen to what thy priest tells thee. Demon, thy own priest calls upon thee. I beg thee to attend to what I tell thee, and not to any thing else, which any other priest may tell thee. Oh **Aaweysa Cadawara Reeri Yaksenee**, oh great she-demon, I call upon thee this day to be bound by my charm. I call upon thee to accept an offering, which I make to thee and thy sisters. I call upon thee by the power of all the gods. Therefore, come here. Look here and come soon. I call upon thee, and command thee by the power of **Vishnu**, to cast thy influence upon this human being, and to take him wholly to thyself. I beg thee to protect me. I call upon thee to tell thee, that from this day, and this hour, and this minute this human sacrifice, which I dedicate to thee, is wholly thine. The **Cattadiyas** are thy obedient slaves. Therefore protect me, but take this

human being as an offering acceptable to thee. Take him. Take him this instant as an offering made by thy servant. Oh she-demon, oh my sister, eat him. Eat his flesh and drink his blood. Eat his bones, and muscles, and nerves. Drink his heart's blood and suck his marrow. Eat his liver and lungs and entrails. Look at him from head to toe, and cover him this instant with thy influence. I command thee this day, oh Aaweysa Cadawara, Reeri Yaksanee, who wast born from three drops of blood, to suck the blood out of this human being. I give him over to thee. Take him. I ask thee and all other she-demons to afflict him with heat, fever, and pain in all the 800 joints and 900 nerves of his body, and in the 300,000,000 pores of his skin. Remain thou with him, till I come back to thee. I tell thee, listen not to any other Cattadiya. By Wissamonny's power I bind thee to do this. I bind thee. I have bound thee. Let this be so."

The Jeewama of the above—"Make three *Pidayni Tatu* (altars) and divide each *Tatuwa* into four compartments. Place in each of these compartments boiled rice of a yellow colour, some of a white colour, and some of a black colour; also place on any of the *Tatu* some milk in two separate leaves, some blood in two separate leaves, five kinds of fried meat, an arrow, and a cock. Surround all these with three turns of a *Kan-ya Nool* thread. Then placing one of the *Tatu* to the east of you, and the other two at your feet, pronounce the charm 133 times over a *Kan-ya Nool* thread and a cluster of *Rat Mal* flowers, which you hold in your hand.\* You will then see three apparitions, but, without getting frightened by them, bind them by your charm. Then take away the thread and the flowers, and get them *passed over*: after which, keep them carefully secured in a box. This Jeewama must be performed on a grave during three Yamas of a Sunday. The man will get mad in three days."

---

\* The *dummala* incense, although not mentioned above, must also be used on this and on all similar occasions. It is omitted here, only because it is too well known as a *sine qua non* of every demon ceremony to require express mention.

The Jeewama of *Sohon Gini Bandenay* (No. 13 in the above list).—“Near a tree, the bark of which has much sap in it, draw on the ground two figures representing the man and his wife, with a piece of charcoal obtained from a place where a human corpse had been burned. Write the names of the parties on the breasts of these figures with the same piece of charcoal. Write also on each of the figures the letters *a. e. u.* Then pronounce the charm over a steel nail, and drive the nail into those parts of the figures which represent the private parts. Pronounce the charm again over 16 nails made of *Pas lo*, and drive them into those parts of the figures which represent the joints. Remove then the earth on which the figures were drawn, and bury it in a grave a few inches below the surface, and make a fire over it with *Pas Pengiri* (the wood of five kinds of trees the fruit of which is sour to the taste:) Keep up this fire for sometime. For offerings, put on an altar some blood, some Rat Mal flowers, a roasted egg, and some boiled rice, each in a separate leaf. All this must be done on a Sunday. The husband and wife will fall sick, become insane, have paralysis in their legs, quarrel and fight with each other, and die at the end of three months, if remedies are not applied in time. The remedy is this—dig a hole in the ground where a human corpse has been burnt. Throw in it nine kinds of flowers and some boiled rice, each folded in 9 separate leaves. Put on an altar close by 9 leaves containing the juice of Rat Mal flowers, and 9 containing boiled rice, and 8 limes. Repeat then these charms (not given here), and taking the limes to the sick people, cut them, pronouncing over them the seven charms *Hanama Wetu Alagu*. The sick people will recover.”

The Jeewama of *Madena Sohon Bandenay* (No. 14).—“Draw the figure of a man on a tiger’s skin, and the figure of a woman on a deer skin. Write the names of the man and his wife on the breasts of the respective figures. Then put upon the figures a *Divi Caduru* leaf,\* a piece of charcoal obtained from a funeral

---

\* *Divi Caduru* is a tree which grows to a considerable height. Its leaves are about a foot long, and two and a half or three inches broad, very thick,



pile, and seven grains of unboiled rice. Fold these in the skin, and tie the two skins together with seven turns of a Kan-ya Noo thread. Before you use the thread for this purpose, repeat over it this charm 49 times, taking care to make a knot every seventh time. Then take 9 thorns from Pas Pengiri trees, and pronouncing the charm 9 times over them drive them into the skins. Make also an altar, and place upon it Rat Mal flowers, milk, porri, and sandal wood, each in a separate leaf, place these at the four corners of the altar, and the skins in the middle. Then perfume them with the smoke of resin, and pronounce the charm 7 times. All this must be done on a Sunday during the morning Yama. After this take away the skins and strike with them the stone, which is opposite to the door of the house. The man and his wife will become insane, and quarrel with each other, and die in a short time."

Every Hooniyan, that produces sickness, ends in death, unless it is prevented in time by charms; and no other remedy but charms can effect a cure, whatever the nature of the disease may be. The longer the Hooniyan influence remains on a man, the less chance there is of its removal, probably because the demon acquires a sort of prescriptive right over his victim, until he bring the man to death in his own time, that is within the time assigned in the charm. Hence, in the mind of a Singhalese, suspicion is always awake and ready to discover a Hooniyan cause in the various misfortunes, which he may meet with in the ordinary course of nature, in the form of disease and accidents. And hence also it is, that he so often has recourse to charms and demon ceremonies, even when he is in the enjoyment of perfectly good health, merely because he wants to ease his mind, which otherwise would be made very unhappy by a doubt, whether a Hooniyan influence may not then be upon him, although as yet there does not appear even to himself any thing, which he can consider to be a sign of it.

---

and of a dark green colour. When bent, the leaf breaks and exudes a thick white sap considered to be poisonous. The fruit when ripe is of a beautiful red colour, and is very tempting to the sight, from which circumstance probably it is, that it has sometimes been called *Eve's Apple*.

**ANGAM CHARMS.**

There is another class of charms, which, though intended to injure others like Hooniyan, have yet been called by a different name, and are supposed to have been originated by a different Irshi. While Hooniyans are supposed to affect a man at different intervals, varying from a day to 30 or 40 years from the time of the Jeewama, and to cause death generally by slow degrees, preceded by a variety of diseases, of which insanity, paralysis in the limbs, and extreme heat in the region of the chest are the most common; these are supposed to be more speedy in their effects, death taking place invariably within seven hours, without any previous indication of disease other than a throwing up of blood through the nose and mouth. These charms are called **ANGAMS**, of which there are on<sup>1</sup>

32. The following are their names:—

- |                      |                     |
|----------------------|---------------------|
| 1 Udatringey Angam   | 17 Narapura Induwa  |
| 2 Hasta Angam        | 18 Narapura Inchia  |
| 3 Suruttu Angam      | 19 Naraporottuwa    |
| 4 Talpat Angam       | 20 Widurucodi Angam |
| 5 Neecha Cula Angam  | 21 Widuru Maraney   |
| 6 Rodi Angam         | 22 Geri Angam       |
| 7 Caturu Angam       | 23 Hasti Angam      |
| 8 Leynsu Angam       | 24 Cula Angam       |
| 9 Tadicara Angam     | 25 Sunaka Angam     |
| 10 Choragata Angam   | 26 Taruka Angam     |
| 11 Reeri Angam       | 27 Yakse Angam      |
| 12 Hanuma Angam      | 28 Wata Angam       |
| 13 Heywa Yakse Angam | 29 Curumbera Angam  |
| 14 Hena Rawana Angam | 30 Raja Angam       |
| 15 Maha Sohon Angam  | 31 Dewa Angam       |
| 16 Muduhira Angam    | 32 Neela Angam      |

These Angams are made use of in the following manner. After the jeewama, the substance subjected to that ceremony, whether it be a flower, a thread, an image, a stick, a handkerchief, a finger ring, or a young cocoanut leaflet, is sometimes (1) buried in the ground at some place, which the intended victim may happen to

"pass over" as in Hooniyan ; or (2) the operator may keep it in his hand and blow upon it, so as to make the breath fall upon him, or (3) he may touch his person with it still holding it in his hand, or (4) he may throw it into his face, or (5) he may fan him with it, or (6) he may make him touch it, or (7) he may leave it at some particular place, where he cannot but take it when he sees it, or (8) he may stretch out his hand towards him, or (9) he may keep it in his hand, and only look at his face ; which of these is to be done, depends upon the nature of the particular Angam. In almost all these cases, the victim is supposed to fall down suddenly in a state of insensibility and to bleed, profusely from the nose and mouth, and, if remedies are not applied within seven hours, death is said to be the result.

*Udatringey Angam* (No. 1 in the List,) is to be used against a man who happens to be standing on any thing higher than the ground, as for instance on a tree, for it is supposed that none of the other Angams can produce any effect on him, so long as he does not touch the ground with his feet. It is also thought that those sailing on water can be affected only by this, but on this point the scientific in these matters do not seem to be agreed.

In the next, No. 2, the charm is pronounced over the right hand which then, being extended towards any one, is supposed to make him fall, bleeding from his nose and mouth, and death ensues at the end of seven hours.

In No. 3, a quantity of *Rat Mal* flowers, over which the charm has been duly pronounced at the Jeewama, are rolled up with tobacco into a cigar, which is smoked, so as to let the smoke be blown by the wind towards another. The same consequences follow as in the 1st.

In No. 4, an Ola being charmed is rolled up in the form of a *Talpotta* or native Ola letter, \* and is sent to the party marked

---

\* *Talpotta* is the leaf of the Palmyra, as *Talapotta* is of the Talipot. The leaf of the Palmyra was, a few years back, the "Note" and "Letter" paper of the Natives; and it is still so generally throughout the Island. The leaf of the Talipot is seldom used for this purpose, but is reserved for making books.

for destruction, who, on breaking open or rather unloosing the bands of what appears to him to be a letter, falls down senseless.

If a man however be fortified by charms against Angams and other agents of demoniac power, he can be affected only by the Angam called *Neecha Cula Angam*, (No. 5), which can break through all such defences, and affect the man as easily as if he had never been protected by any charms whatever.

If you tell a Cattadiya that his science of charms is nothing but an absurd ridiculous fiction, calculated to delude only the most ignorant and credulous; that it can do nothing to those who do not believe in it, and if you ask him why it can not injure an Englishman, although the latter courts and challenges a trial, he will tell you, if you are a Singhalese, (but if you are an Englishman, he will give you a very different reason), that, though a demon revels in blood and human carcasses, yet he possesses certain ideas of cleanliness and decency, and that therefore he is unwilling to affect with his influence an Englishman, who does not cleanse his person with water after the discharge of the bodily functions; he will tell you indeed that there is *one low filthy demon*, who, being indifferent to dirt, does influence even an Englishman, *when forced to it* by the charm called *Rodi Angam*, (No. 6); but that in the Jeewama of this Angam, a green leaf of the *Alu Kesel*\* plantain tree, used by a *Rodia* (a man of the lowest caste in the Island) to put his meals on, is necessary; and that it is extremely difficult to get this, as no *Rodia* will leave it behind him after he has taken his meals on it, and will not part with it to any but one of his own caste.

If sticks or clubs, submitted to the Jeewama of *Tadicara Angam* (No. 9), are left on roads and other places frequented by people, any person passing by and seeing them will be irresistibly compelled to take them up, and use them in assaulting every one he may happen to see, and at last turn them against himself.

---

\* *Alu Kesel* literally means *Ash Plantain*; it is so called from its fruit being covered with something similar to ashes.

The following is the charm *Neela Angam* (No. 32):—

“Oh Brahma, Vishnu, and Siva, may you be adored! Oh demon of blood, receive this human sacrifice, which I make to thee. Accept it instantly. Look at it with thy thousand eyes. Oh Brahma, Vishnu, and Siva, may you be adored! Stop ye, Pilliran and Neeliran. Wissamonny's power is great. There is not a demon, who does not feel his power. Stop thou, Caluga Pullay! Vishnu is great. His authority prevails over all demons. Stop thou, Elendri Dewi! Stop ye all! I make this sacrifice to you. I dedicate this human being to you. Blood of a delicious taste, heart, lungs, liver, and marrow, all delicious, are yours. I deliver him to you. Take charge of him. He is yours. Thou, Reeri Yaksanee, look at him instantly, and take him as an offering acceptable to thee. Take him immediately. Throw him down. Oh Brahma, Vishnu, and Siva, adoration be to you! The powers which originated from queen Yasodara, and the powers belonging to Vishnu, as they now prevail at the temple of the Cannibal demons, and who once destroyed the prince Wisamatoma—by these powers I deliver this being to thy charge, Oh Siddhi Maha Sohon dewatawa, and to thy charge, thou son of Gajacumbacari. By those powers I command, that he, who crosses this stile before my return hither, be taken charge of by Billey Gopolu Yaksanee. Let the dewatawa [Maha Sohona] take charge of him, as his. Let Billey dewatawa of the South take charge of him, as his. Let Dalla Seyna, chief of demons, take charge of him, as his. Take him. Thou Siddhi Maha Sohon dewatawa, look at him and take him. Throw him down. Throw him. Do it. Let this be so.”

The Jeewama of the above—“Make a Mal Bulat Tatuwa on a grave, or at a place where three paths meet, and put on it some sandal wood dissolved in water, a few Rat Mal, Idda Mal, and Jessamine flowers, each kind in a separate leaf. Make a Pidayni Tatuwa\* and put upon it a human bone, some porri, a little blood,

---

\* The difference between a Mal Bulat Tatuwa and a Pidayni Tatuwa is, that on the former rice and other eatables are not offered, while on the latter they are, with or without flowers and perfumes.

and the fang of a Cobra de Capello, each in separate leaves, together with a young king cocoanut cut open at one end without spilling its water. Then surround the whole with a Kan-ya Nool thread, so as to include within the ring the Mal Bulat Tatuwa, Pidayni Tatuwa, and yourself. Lie down on your back with your head towards the north. Place one of the Tatus on your right and the other on your left, and the fire pot and resin near your right foot. Repeat then the charm 108 times, each time smoking the two Tatus with the resin. Do this during the midnight Yama of a Sunday. After this, put the sandal wood powder carefully into a little box, and pronouncing over it the charm three times, shut the lid with your right hand, while you support the box on the back of your left hand. Then take this away, and rub some of the sandal powder on any of the cross sticks of the fence stile with the middle finger of your right hand; every one, who attempts to get over that stile during the first seven hours, commencing from the time you first rubbed the sandal on it, will fall down senseless and bleeding, and, if not cured immediately, will die in seven hours."

Angams and Wedding processions are so intimately connected with each other in the mind of a Singhalese, that, if a bridegroom or his bride happen to feel a little unwell while on their way to be married, it will most probably be attributed to an Angam. During these processions, that is, when the bridegroom goes to the house of the bride, or when he returns to his own accompanied by her and all their relatives, it sometimes happens, that either he or she, and sometimes both, get hysterical and fall into swoons which last about a quarter of an hour. This is most probably owing to their having, for the best part of the day, been obliged to remain overloaded with an amount of clothing,\* to which they (especially the

---

\* The ordinary dress of a man of the middle classes consists only of a *Saron* or four yards of white cloth, wrapped round his person so as to cover it from the waist to a little below the knee. When a man has occasion to go beyond the precincts of his village, this dress is a little improved upon; he puts on a jacket and sometimes a shirt and wears sandals on his feet, he adorns his head too with a large comb, which is worn in different fashions by different castes.

man) had never been accustomed; combined with the heat, noise, excitement, and their own consciousness of being for the time the "observed of all observers." Hysterics or any sudden sickness on such occasions is always attributed to an Angam caused by some unfriendly person among the company. The Cattadiya, who often forms one of the company to be ready on such an emergency to render his services, does his part on such an occasion, and of course the patient generally recovers under his management, as much to the glory and honour of the profession as to his own personal benefit. I recollect several instances of this kind, which have occurred in my own presence, among others, the following:—

About 19 years ago, when I was a lad of 15, I was on my way to school with three or four school fellows, when we heard the usual accompaniment of a Wedding Procession, viz., the sound of drums and of brass cymbals, mingled with the loud voices of three or four singing men all chanting together in a sort of chorus. We all stopped to see the procession, which was slowly moving on towards us at some distance in our rear; and as their way lay in the same direction and on the same road as ours, we gladly kept them company, keeping as near as possible to the tom-tom players and the dancing boys, who interested us much more than anybody else in the procession, the bride and bridegroom included. Immediately behind us were some 10 or 15 people, and next to them came the bridegroom. He was dressed, as is usual on such an occasion, in the style of a Modliar, and was attended on his right and left by his two "friends," men nearly of the same stature and dressed in the same style as\* himself. Then came some more people, and behind them the bride and another woman in a bullock *hackery*. Scarcely ten minutes had elapsed from the time we joined them, when we heard the cry *apoyi* (ala-), the usual expression of distress. I turned round, and saw the bridegroom with closed eyes and drops of perspiration pouring down his face in the

---

\* Instead of men of the same height as the bridegroom sometimes two little boys are substituted, which custom however prevails only in and near the larger towns.

arms of three or four people, who were supporting him from falling down, and apparently senseless. His great velvet coat was now removed, and the shirt collar opened to give him the benefit of air. In another moment a man was seen pronouncing in an inaudible voice (the motion of the lips alone could be seen) his charms, first over a lock of hair of the sick man, which he formed into a knot after his mutterings were concluded, and then over a cup of water. In 5 or 6 minutes more, some of the charmed water was sprinkled over the man's face, and some poured down his throat. He almost immediately recovered, and the procession again moved on. When the incantations were over, I heard the Cattadiya say, with an air of confidence and triumph. "Now, don't fear, he will be all right soon," and sure enough he was, which even then, young as I was, I thought was more owing to the refreshing coolness of the water he drank, than to any supernatural virtues imparted to it by the incantations. Several members of the procession, especially the nearest relatives of the bridegroom, gave vent to their feelings of resentment in dark, mysterious hints, expressed in obscure and sententious language, such as "Very well" with a peculiar shake of the head, "Well, let us see," "You can see," "We are also still living," and other similar expressions, quite intelligible to a Singhalese, and which boded no good to the culprit, who had brought this Angam on the bridegroom.

We can adduce instances like this in great numbers; but the above will suffice to give an idea of a Wedding procession afflicted by what is supposed to be an Angam charm.

In 99 cases out of a hundred, it is the bride, and not the bridegroom, who displays these symptoms of what is supposed to be Angam influence.

Whether a Cattadiya forms one of the procession or not, certain precautions are always taken against the bridegroom or the bride falling under the influence of an Angam. These precautions consist in pronouncing charms over one end of the handkerchief which they carry in their hands, and then tying up that end into a knot. Sometimes other amulets called *Yantra* are worn about their persons.



There are three other kinds of charms, called respectively **KALAN**, **CULAMBU**, and **SERRA**, intended for the same purpose, and used nearly in the same manner as Angams, but slightly differing from them in certain respects. This difference is said to consist in this, viz., that, while Angams can only affect men, Kalang, Culambu, and Serra are powerful enough to affect demons too, although in their case death does not result, as in the case of men. These are said to be used sometimes in cases of demoniac possession, when it is found difficult to exorcise the demon by ordinary charms. The exact number of these has not been ascertained. We give below the names of some of them.

*Calang.*

- |                        |  |                     |
|------------------------|--|---------------------|
| 1. Vishnu Calang       |  | 4. Pattini Calang   |
| 2. Canda Cumara Calang |  | 5. Dewol Calang     |
| 3. Dedimunda Calang    |  | 6. Narapura Calang. |

*Culambu.*

- |                         |  |                    |
|-------------------------|--|--------------------|
| 1. Vishnu Culambu       |  | 4. Pattini Culambu |
| 2. Canda Cumara Culambu |  | 5. Dewol Culambu   |
| 3. Dedi Munda Culambu   |  |                    |

*Serra.*

- |                       |  |                        |
|-----------------------|--|------------------------|
| 1. Vishnu Serra       |  | 4. Pattini Serra       |
| 2. Canda Cumara Serra |  | 5. Dewol Serra         |
| 3. Dedi Munda Serra   |  | 6. Wayissrawana Serra. |

The Jeewama of these three classes of charms is supposed to be attended with greater danger to those engaged in it, than of any other class of charms yet mentioned, and it is pretended that on that account they are seldom or never resorted to.

**PILLI CHARMS.**

We now come to that, which is considered to be the highest and most important class of charms, which is said to exhibit the extraordinary powers of the art of Sorcery in the most unequivocal manner. We mean *Pilli*. In the case of the other classes of

charms already noticed, although the effects produced by them are brought about by demons, yet these demons themselves, never appear visibly to men even in disguise, except at the Jeewama ceremony of some of them. But the Pilli charms are considered to be so singularly powerful, that the demons assume some visible shape, while executing the duty assigned them by the charm. Besides, the effects of a Pilli charm are said to be instantaneous, almost simultaneous with the conclusion of the Jeewama. In the case of Hooniyan (a very few excepted), several months may elapse before the charm begins to take effect, and even then it takes a considerable time to bring the man to his grave. In Angams there is an interval of seven hours between the moment of death and the time, when the charm first takes effect. But in Pilli, death is the only effect, and that almost simultaneous with the Jeewama. Again, both in Hooniyans and Angams, even after they have taken effect, there is still a chance of a cure at any time before the man breathes his last; but the moment a Pilli charm takes effect, there is an end of every hope of escape, even though the actual moment of death may be an hour or two later. If a man however be a sorcerer himself, and, *before* the charm has taken effect on him, is able to ascertain that a Pilli is directed against him, he can, if he is acquainted with the necessary counter charma, ward off the danger, provided he immediately does what is necessary. There are eighteen different Pillis, of which Cumara Pilli is the most popular. We give below the names of these 18. They are as follows:—

- |                      |                        |
|----------------------|------------------------|
| 1. Reeri Pilli       | 10. Maha Sohon Pilli   |
| 2. Naga Pilli        | 11. Oddi Pilli         |
| 3. Cumara Pilli      | 12. Debara Pilli       |
| 4. Coli Pilli        | 13. Bambara Pilli      |
| 5. Kan-ya Pilli      | 14. Widiga Pilli       |
| 6. Kana Mediri Pilli | 15. Singha Pilli       |
| 7. Garunda Pilli     | 16. Gaja Pilli         |
| 8. Curumini Pilli    | 17. Gini Pilli         |
| 9. Mala Pilli        | 18. Neecha Cula Pilli. |

In each of these a particular demon is supposed to go to the intended victim, disguised in some particular form. In the first he is said to disguise himself as a fair looking young man; in the second, as a Cobra de Capello; in the third, as a boy; in the fourth, as a hen; in the fifth, as a little girl; in the sixth, as a firefly; in the seventh, as a peacock; in the eighth, as a beetle; in the ninth, as an old man; in the tenth, as a wild hog; in the eleventh, as an old woman; in the twelfth, as a hornet; in the thirteenth, as a bee; in the fourteenth, as a Malabar man; in the fifteenth, as a lion; in the sixteenth, as an elephant; in the seventeenth, as a ball of fire; and in the eighteenth, as a dog.

Soon after the approach of the demon, the man is said suddenly to drop down dead, or to vomit blood first and die immediately afterwards. In some Pillis the demon uses violence, and either stabs the man, or strangles him to death. In the preparation of Cumara Pilli, the corpse of a male infant, the firstborn of his mother, is essential. This is first submitted to a sort of embalming process, and then having been dried by the heat of a fire made with sandal and Pas Pengiri wood, is locked up in a box made of *Cohomba* or Banyan wood, and placed in some spot unfrequented by women, so as to be safe from the pollution of *Kili* or Uncleanness.\* At the Jeewama, two knives are placed in its right and left hands, and the charm is then pronounced over it, during the three Yamas of a Sunday, on a grave not more than three days old. Of course, offerings are made to the demons, as usual. It is supposed that

---

\* The *Uncleanness*, or as it is called in Singalese *Kili*, is a sort of imaginary pollution anxiously avoided in every thing relating to Demon Worship. The principal occasions or causes of uncleanness are the death of a human being, the menstrual discharge in women, the flesh of certain animals such as pigs, peacocks, monkeys, and the fishes *Magura* and *Ingura*, and the birth of a child. In the case of death, the uncleanness is supposed to last for three months together; and it extends its mysterious influence not only in and near the dead body or the house where the man died, but to a distance of "seven gardens" [about a  $\frac{1}{4}$  or  $\frac{1}{2}$  of a mile] from that house. The uncleanness arising from death is the most malignant, and is supposed to come upon a person, even when he passes by the house of a deceased person. The principal consequence

demons then come in great numbers to the scene, endeavouring in every possible manner to frighten away the men, who however take care before the commencement of the ceremony to fortify themselves by charms and other amulets against these attacks. When the charm is perfected, the mummy becomes animated, and stands up. Then, certain other charms being pronounced over it, the name of the intended victim written on an ola is tied round its neck or its wrist; it then flies through the air like lightning to the man, who is to be destroyed. If the latter happen to be himself a man well learned in charms of this description, and if he recognize the disguised demon instantly, he will be able by means of certain other charms to send back the demon, who, when so sent, will and must kill the person, who first roused him at the Jeewama, no charm nor amulet of any kind being of any avail against him on this occasion. But if the former fail to pronounce his charm, either from not knowing one, or through fright, or from not suspecting a Pilli demon in the animal before him, it will be all over with him in a short time, no charms or any other demon ceremonies whatever helping him in the least, after the Pilli has once taken effect, that effect being generally immediate death.

If you ask a Cattadiya or any other Singhalese, who is at all conversant with these matters, whether these Pilli charms are actually put in practice now, and whether they are really followed by the wonderful results ascribed to them, he will first consider you, if a Singhalese, to be a fellow spoiled by contamination with Englishmen or by your English education, and then tell you that

---

of exposing oneself to the influence of this Uncleaness, is sickness, and in the case of a man, who is already suffering from some sickness, the consequence will be to aggravate the disease. A man bitten by a mad dog, if exposed accidentally to this influence within three months, is supposed to get hydrophobia, and die most miserably. Hence this Uncleaness is greatly dreaded by the people, and none but the very nearest relatives will enter the garden of a house in which a person has died, the more distant relatives remaining outside the garden fence.

at present the science is on the decline, that now there are few or none skilful enough to be able to perform those charms without danger to themselves, and that therefore instances of Pilli charms successfully performed in these degenerate days, are not so general as those of Hooniyan charms, but that the science itself is as true, as that Buddha was the greatest being that ever was born in the world. He will confirm this statement by regaling you with a hundred anecdotes, how such and such a Pilli had succeeded at such and such a place, with all the interesting particulars connected with them. If you shew any symptoms of scepticism about the accuracy of his marvellous accounts, he will endeavour to remove all your doubts and scruples, by giving you the benefit of his own experience of a certain Pilli charm, which actually killed, or was very nearly killing, an acquaintance or relative of his.

The following is an anecdote of this kind, which we give in the words of the narrator :—

“Well, Sir,” said he, “you must freely pardon me, when I tell you that young men—I beg your pardon again and again, Sir, for saying so—know very little about these matters. You think—pray, don’t be angry with me for saying so—that all that is great and wonderful is peculiar to the European. You have been taught to read English books and to imbibe from them notions, which militate both against the faith of our forefathers, and against the illustrious sciences they cultivated. This unnatural conduct has in some instances been pursued so far, as even to make some of our young men cut their hair and put on trowsers. Long hair and the *Condey*,\* which have so long been the pride and honourable badges of our nation, are now despised by some of these young men, as if they were marks of degradation. Instead of combs, they now wear English *Piriwehi*† on their heads. But alas! there is

---

\* *Condey* is the hair tied up into a knot behind the head.

† *Piriwehi* is a basket made of cocoanut leaflets for some temporary purpose, and it is sometimes used derisively as a contemptuous nickname for a cap or hat.

no help, no remedy for all this. Well, Sir, you speak of the omnipotence of English science as being able to send news by an iron rod thousands of miles in a few minutes, to make carriages loaded with 70 or 100 cart-loads of goods move at the rate of 30 or 40 miles an hour merely by the agency of fire and smoke, without the help of bullocks or horses. You speak of English medicine as being superior to our medicine. But do you know, Sir, that none of these sciences or arts originally belonged to the Englishman himself. They all belonged formerly to Brahmins, and the English or some other Europeans have somehow or other met with their books; and, because they are men of sense and thought, they have been able to apply the rules laid down in those books to something practical, by which they may advance their interests. The Brahmins may not perhaps have those books with them now; but even if they have, they neither possess the opportunities, nor the means, nor even the energy and grasp of mind, necessary to derive any practical benefit from them, like the English." He went on in this manner for a full hour, and then continued, "To remove then every doubt from your mind respecting Pilli, I will tell you what happened once under my own eye. One day about 25 years ago, my eldest brother had a quarrel about some charm-books with a native of the Matura district, who was then a guest at the house of a neighbour. Of course, after the quarrel, which was confined only to words, we thought no more of it. About 12 o'clock the following night, there came into the Verandah of my brother's house, where I happened to be that night, a hen with a large brood of chickens. I was awake, though my brother was fast asleep. Of course to my mind there was nothing extraordinary in the matter, but the next moment my brother awoke, exclaiming in a very loud voice 'Chee! Chee,!' and then told me in\* a harried manner to bring him a few grains of rice. Though I was surprised both by his exclamation and by his excited manner, I obeyed and immedi-

---

\* *Chee* is an Interjection expressive of disgust or contempt, and is nearly equivalent to the English *Pshaw*.

ately brought him a handful of rice from a Chatty\* in the kitchen opposite, wondering all the while what my brother was going to do. He took the rice into his hand, and muttering a charm over it threw it to the hen, which during this time, which was not more than 4 or 5 minutes altogether, was moving round and round my brother's bed. The hen first fluttered its wings, and then very quickly picked up the grains and went away, all the while croaking and cackling in a peculiar way. My brother then shewed me a small piece of flesh looking like the heart of a fowl, still dripping with blood, which, he said, fell on his breast and roused him from sleep; this was the *Coli Pilli* (No. 4 in the list); and he congratulated himself on his narrow escape, and on his success in turning back the Pilli to the very man, who had sent it to him. Well, Sir, the next morning we heard that the Matura man had died during the night, Well, now, what say you to that?" Knowing very well that the greatest miracle, that could be performed in these modern times, would be to convince by reasoning an uneducated old Singhalese of the absurdity of any of his opinions, we contented ourselves with quietly remarking, "that it appeared to us, that, without the agency of a Pilli or any other charm, it was quite possible that a hen and its chickens should come into an open Verandah, also carrying with it a piece of flesh picked up somewhere; that it was equally possible that the hen should, while moving about the bed, drop the piece of flesh on the man sleeping on it; and that it was not at all miraculous that a neighbour, with whom your brother may have had a quarrel lately, should die by some natural means the same night." On this, the old man looked daggers at us, but suppressing his rage he replied, "but I was wide awake, and saw the hen from the first moment she came into the Verandah to the moment of her leaving it, and during all that time I did not see her getting on the bed or dropping a piece of flesh on my brother's person." "Could not the hen have come

---

\* *Chatty* is the name given to any earthen vessel of a moderate size used as cooking utensil.

into the Verandah," said we, "sometime before you awoke, and have left the flesh on your brother's person without either of you being aware of it at the time; and could not the hen then have returned to the Verandah a second time, the time that you say you saw her coming in." "Nonsense, that was not possible," said he, "for the moment the piece of flesh fell on my brother's person, he called out, as I said before; and it was the fall of the lump of flesh that roused him. Sir, I am sorry you should thus cavil at things which our forefathers believed, and which we old folks have ourselves found to be as true now, as they were in the days of the Irishis." The old man seemed very excited, and the more untenable any of his arguments appeared even to himself, the more dogmatic and wrathful he got. When any of his statements or arguments appeared to admit of explanation on ordinary reasonable grounds, he was sure to oppose it by advancing a fact or two, for which, we are quite sure, he was more beholden to his imagination and invention than to his memory. This old man is a respectable man in his own way, has had all the advantages of education according to the native system, and is a type of a large class of the Singhalese. What those say or think, who are still less enlightened, and who have not had the same "advantages of education," the reader may easily imagine.

During a previous part of our conversation on the same subject, he told us another anecdote of the same kind, which he had *heard* from a "trustworthy" person. "Some 25 or 30 years ago," said he, "there was a man named Abileenu, a boutique-keeper in the town of Kandy. Among other things exposed for sale in his boutique, there were some green *Aanamalu* plantains.\* Another man named Bayi Appoo came to this boutique one day, and wish-

---

\* *Aanamalu* is a kind of plantain very common in Ceylon; the fruit is longer than in any other species, and is used by the Singhalese in curries. All other kinds of plantain, when quite ripe, acquire a reddish colour, especially in their outer coverings, but *Aanamalu* alone always retains, even when ripe, the same green colour, that it had before it had become ripe.



ing to buy some of the plantains enquired their price; on being told that eight were sold for a *pice*,\* he offered to buy twelve for a *pice*, which so irritated Abileenu, that he abused the other in very indecent language, using among other expressions this—‘send your mother to me with a bag to fetch plantains at twelve for a pice.’ Well, Bayi Appoo, who had only done what any other man would have done when he wanted to buy any article from a boutique, was very much provoked by this language, which he had not deserved; therefore when he heard the expression “Send your mother to me with a bag to fetch plantains at twelve for a pice,” he rushed towards the other intending to box his ears, but suddenly checking himself he replied “very well, then I will send her to you to-night,” and he went away. That night about 12 o’clock there came to Abileenu’s boutique an old gray-haired woman. How she got in after the doors had been fast locked, was more than Abileenu’s people could say. But there she was, sitting on a bag and looking steadfastly with glowing fiery eyes at the sleeping Abileenu. In a very short time Abileenu was heard to utter a loud, shrill scream, and the next morning after daylight when the other people of the boutique looked at Abileenu, they found him a cold corpse. One of these boutique people himself told me all this.”

About eight years ago, the death of a young woman from the bite of a Cobra in a village not far from Caltura was attributed to a Pilli; to prove that it was so, her relatives argued that, although death may follow the bite of a Cobra without there being any Pilli in the matter, yet in this particular instance the snake, which could have bitten many other people who were more in its way, purposely avoided them all; and that, although many attempted to drive it away from the neighbourhood of the house, yet it did not only not leave the premises, but ran through the midst of the other people, until it approached the young woman, and fastened its fatal fangs in her.

---

\* A *pice* is three-eighths of a penny.

Some five or six years ago, a man was killed by a wild hog, while he was sitting near his own door in a distant part of Hewagam Corle; and because this happened in broad daylight at his own house, it was attributed to a Pilli caused by an enemy with the assistance of some Cattadiya.

### JEEWANG, BANDENA, AND DEHENA CHARMS.

JEEWANG is the name of a particular class of charms, whose object is to "bind" any demon in a certain manner to the will of a man, so as to make him an obedient slave to the latter, whether he wishes him to inflict sickness or to perform ordinary domestic work. In all other charms a demon has only to execute a particular duty on one particular occasion or during a certain length of time, and, when that is done, he is free; but in Jeewang Charms the demon becomes a perpetual slave, and ceases to be a free agent, as far as the man, who has bound him, is concerned. The following are the names of a few of these charms:—

- |                     |                             |
|---------------------|-----------------------------|
| 1. Aacora Jeewama   | 6. Saraspatee Jeewama       |
| 2. Mohanee Jeewama  | 7. Aananda Bahirawa Jeewama |
| 3. Irala Jeewama    | 8. Maha Bahirawa Jeewama    |
| 4. Oddiya Jeewama   | 9. Patthracali Jeewama      |
| 5. Bahirawa Jeewama | 10. Hanuma Jeewama          |

A demon, who is under the influence of these charms, is supposed to be always in the company of the man, never being able to leave him for a moment, or to disobey him in any thing, until the death of the latter dissolve the bond. He travels with the man, sits wherever he sits, waits near his bed when he sleeps, and is his constant companion. He does every thing his master commands, whether it be the infliction of death, or drawing water from wells, or repairing the garden fence, or removing heavy stones which had resisted the united exertions of hundreds of men, or felling large trees, or doing any thing else desired by his master. A man, who

has a demon under his control in this manner, is therefore supposed to be a dangerous neighbour, for his power is considered to be such, that, even when he speaks to or looks at another angrily, the latter is supposed to fall sick. Such a man is supposed to have a very disagreeable exterior, seldom combing his hair or washing his person, and looking generally sulky and stern; ungracious in his manner, soon put out of temper, and avoiding pork and other things considered to be unclean. He is also scrupulous in avoiding houses or other places contaminated by any Uncleaness.

This sort of close connection with a demon is however considered to be very dangerous, in as much as the demon, though paying an unwilling and forced obedience to the man, is yet always watching for an opportunity of destroying him, and of obtaining his own release. Such opportunities, it is said, he will easily meet with, unless the man be always on his guard, by fortifying himself with those means of defence which other charms afford, and by living agreeably to certain rules laid down for those who retain demons in their service. Hence these charms are never tried in these days, although many men in bye-gone times are said to have used them successfully. If you challenge a Singhalese to prove any of the absurd things he so confidently relates, and which, if true, must from their very nature be susceptible of proof, he will always appeal to the experience of the past ages, and declare that, 30 or 40 years ago, there were many men well skilled in these difficult and important classes of charms.

In the second class of charms, namely those intended to cure diseases, or to secure one from falling sick from the influence of demons and charms, there is a great variety, of which the principal are **BANDENA** and **DEHENA**. **Bandena** is a term, which simply means "binding" or a "bond," and although many of the **Hooniyan** and other charms are also sometimes called by the same name, yet it properly belongs only to those, by which diseases brought on by demons are cured. The number of these charms is very great, and we give below the names of a few:—

blows in this case, being but an ordinary man and not a Capua, and no charms or invocations being made to any demons or gods for assistance, the marks of the blows might or might not remain, without in either case compromising the correctness of the doctrine.

The following is the charm *Kattu Mandiram* used by the Annevy in the exorcism of demons.

"Oh God! May my head, neck, and throat be under the protection of the Father, the Son, and the Holy Ghost! May they be under the protection of the powerful Commander, the Archangel St. Michael and his sword! May my right shoulder be under the protection of the Archangel Gabriel and his sword! May my left shoulder be under the protection of the Archangel Raphael and his sword! May my breast and back be under the protection of all the Saints! May my navel be under the protection of the twelve Apostles! May my private parts be under the protection of the 11,000 virgins! May my feet, legs, the soles of my feet, and the 20 fingers and toes with their nails be under the protection of all the Saints! I have taken God to be my protection. I have brought the Ten Commandments to my mind. In the name of the Father, the Son, and the Holy Ghost, who sit on a throne of glory resplendent with the effulgence of starry gems, in the Holy Name of the Divine Mother, who obeys the Divine Will, I expel all inimical demons, who come from the East, the West, the North, and the South; demons who come from hell beneath the earth, from the five points of the sky, and the sixteen points of the world. I bind all poisonous creatures, be they beasts, birds, or fishes; be they those, that creep upon their bellies, or that move on their legs, or that fly through the air by their wings. I bind elephants, horses, bears, lions, tigers, and all other animals, that may be dangerous. I bind all these, so that Angam, Pilli, Hooniyan, the dangers of *passing over*, and all the demons, preteyas, and the diseases caused by these, may break, break, flee, flee,\* and be expelled again and

---

\* Repetition of the same word, especially words like those in the text, is a very common practice in charms, because such repetition is supposed to increase the force and efficacy of a charm.

again. I bind by the divine power of the Cross. I bind by the power of the five divine wounds. I bind by the authority of the Angels. I bind so as to render the bond indissoluble. By the divine power of the Cross. Amen, Jesu."

This remarkable phenomenon in the conduct of thousands of Singhalese women throughout the Island can not, we believe, be wholly explained away by the supposition, that *all* these women are only humbugging every body by shamming madness, merely for the unreasonable pleasure of putting themselves in a state of frantic excitement or of assumed insensibility; an explanation the more unsatisfactory, when it is considered that this peculiarity is often found even in respectable old ladies verging upon 60 and 70—mothers of large families—very respectable, sober, honest, modest characters—who, so far from wishing to simulate madness or demon possession, have always appeared to be quite incapable of such wilful folly. Further, we have often had ample opportunities of minutely observing every thing said and done by one or two such persons when under "possession," and although on such occasions we were very anxious to convince all around us that all this was nothing but shamming, or at best the effects of an excited and morbid imagination, we yet never failed to perceive much, that could not be reconciled with any idea of imposture, and however much we endeavoured to believe in their being counterfeit, we never succeeded in fully convincing our reason.

We must however state here in justice to these old ladies, that their symptoms of possession were not exactly like those we have generally described above; they did not call upon demons, nor shout and cry, but simply sank down on the ground as in a fit of insensibility, and then continued, now and then, to tremble very violently, gnashing their teeth and rolling their eyeballs. In this state they generally remain about three quarters of an hour, and then sit up as if awaking from a sleep. For nearly a day after this they complain of weakness, and after that are as well as ever and about their household duties as usual. In other respects they

do not seem to be suffering from any disease, but on the contrary are in the enjoyment of good health.

Many of the so-called demon possessions are without doubt mere shams, grown perhaps fashionable among a certain class of ignorant coquettish young women; but some, forming of course a small minority, do not, we are inclined to believe, admit of this explanation, if we can place any reliance on our own senses and judgment. Whether or not real demon possessions, such as those mentioned in the New Testament, do take place in these days too, we do not know; but if, as we think, they do not, this remarkable phenomenon can be explained only by attributing it to involuntary Mesmerism and what has been called the Cataleptic trance. But the wonder is that it should be so frequent and common in this Island, in so much as to exceed in the number of occasions and the number of persons affected, all the demoniac possessions or what were so called, which have ever been recorded as having occurred in all other parts of the world put together, from the beginning of the Christian era down to this day. We do not know what are the causes which induce the mesmeric state in a person; but if an excited imagination, overwrought feelings of superstitious fear, and an intense fervid belief in the existence and the attributes of demons, combined with very weak, credulous, timid minds, can do it, then all these may be found in a high degree in a large majority of Singhalese females.

However, whatever may be the cause, whether it be mesmeric agency, or mere shamming, still the fact is remarkable in either case. For, if Mesmerism or the Cataleptic trance, be the cause, why or how it should be found in such active operation in so many instances in this Island during every year, would be an interesting subject of inquiry, nor on the other hand can the other imputed cause (if cause it be in all those instances), viz., a morbid propensity, which leads women to counterfeit demon possession, appear to be a matter less remarkable, in as much as it shows the low state of education which exists among the Singhalese.

---

## CHAPTER VII.

## DREADFUL CONSEQUENCES OF A BELIEF IN DEMON INFLUENCE.

The reader, who has had the patience to follow us thus far, will, we believe, have his mind impressed with one principal idea, viz., that credulity and superstitious fear exercise so powerful an influence over an uneducated Singhalese, as to blind his reason entirely, the moment his mind reverts to demons or to any thing relating to them. Without such an hypothesis, it is difficult to believe that there are men now living, who honestly and sincerely say and believe that they have actually seen demons, and have thereby fallen sick, from which they recovered only by the aid of charms and demon-ceremonies, and that by similar means it is in the power of any man at any time to inflict disease or death or some other misfortune on another. The account we have given of these spells, and of the wonderful virtues believed by the Singhalese to be inherent in them will, we believe, only raise a smile of contempt and pity in an Englishman's face; but if the Englishman knew to what deplorable results this belief often leads, his look of contempt would be changed to one of horror.

In many of the inland villages of this Island factions, quarrels, bloodshed, and crime have often been the consequences of this belief in charms, especially in Hooniyan charms. One family living at bitter enmity with another, with all their respective relatives and friends ranged on either side and each trying to injure the other in every possible way, by perjury, litigation, theft, and assault, turning peaceful villages into scenes of misery, and harmless peasants into ruthless murderers, and thereby perpetuating the feud from one generation to another, are not things of rare occurrence; and all this, either because a young man of one family happened on one occasion to prepare Hooniyan charms against a young woman of another family, because he could not get her to marry him; or because a man fell sick soon after an unfriendly neighbour had been seen to bury a charmed image under his garden gate, or

for some other similar reason. Among many instances of this kind which have come under our own notice, we will give here one or two for the benefit of the reader, from which it will appear that, if the power and influence of demons are to be perceived anywhere in these Hooniyan matters, it must be in the miseries brought on many an honest and happy family by their credulity.

In the district of Caltura in the Western Province of the Island, there lived some years ago a man, we will call Hendrick Appoo, with his family consisting of his wife, three sons, and one daughter. The sons were grown up men, married and having children. The daughter was the youngest and still unmarried. Hendrick Appoo was considered by his fellow villagers to be a rich man, that is, he had some 15 or 20 head of cattle, and about 6 or 7 acres of land scattered here and there in the village in small pieces of a rood or two each; and he had too his own paddyfield and sweet potatoe and betel plantations with 50 or 60 cocoanut trees and 7 or 8 jack trees: it was also supposed that he had in cash about 2 or 3 hundred Rixdollars (£15 or £22 10s.) His father had been a Widhane Aratchy, and so he was a village aristocrat. In short, he was a "Country gentleman." He had a neighbour we shall call Harmanis Appoo, also well thought of by his neighbours as a man well to do in the world. This man had only two children, both unmarried, young men of good character. As he and Hendrick Appoo were men in the same rank of life, and especially as they both happened to be nearly equal to each other in the respectability of their pedigrees (an essential point in the matrimonial arrangements of the Singhalese,) it was proposed and agreed between them that the eldest son of the one should marry the daughter of the other. The proposal met with the approbation of nearly all the members of both the families; and so both the families became very friendly and attached to each other, assisting each other in various small matters, and in short living on the most intimate and happy terms with each other, as is usual on the proposal, and before the consummation, of a marriage between any two families. Of course the two young persons, who were most interested in the matter,



were not consulted, for they had no consent to give or withhold; such things being always managed for them by their parents. But sometime afterwards Aberan Appoo, a maternal uncle of the girl, and a man who was most scrupulously punctilious in matters of family pedigrees, returned from Saffragam where he had been trading for 4 or 5 months, and now for the first time hearing of the intended marriage determined to frustrate it, because he found a flaw in the pedigree of Harmanis Appoo, viz., that the father of his grandmother had been married to the descendant of a bastard slave. This in Aberan Appoo's opinion was an insuperable obstacle to the marriage, and so he set himself to work upon the family pride of his brother-in-law and his sister, in which he succeeded so well, that the match was soon broken off, and all intercourse between the two families ceased. Harmanis Appoo taking this as a mortal and unpardonable affront resolved to have his revenge. So he went to a Cattadiya in the Southern Province, and got him to prepare a Hooniyan charm against the young woman, and returning home, quietly waited for the result, of which he had not the slightest doubt. Curiously enough, just two months after this, the young woman died from the effects of a fever, which she had contracted through exposure to bad weather. Old Harmanis chuckling at this and too vain to hold his tongue confided to one or two of his confidential friends, how he had taken his revenge on Hendrick. Hendrick himself had heard before this of the other's visit to the Southern Province, but had never learned the purpose of the journey. As usual with prudent parents especially when a marriage proposal breaks off, he had taken every possible precaution, by means of charms and other amulets, to secure his daughter from the dangers arising from Hooniyan and other demon-influences; but when he heard, the day after the funeral of his child, of what Harmanis had been boasting privately to his friends, it confirmed him in his previous suspicions, and roused all the evil nature in him. These suspicions were still further confirmed by the discovery of a small wooden image buried under one of the front steps of his Verandah. So, a few days afterwards, he and his three sons

with two others, hired with drams of arrack for the occasion, quietly repaired in the dark to Harmanis' house, and severely assaulted him, his wife, his sons, and all others who were in his house. The next day they went before a Magistrate and swore an affidavit, that he (Hendrick Appoo) and his sons, while returning home one night from Morottoo with a large sum of money, had been waylaid by Harmanis Appoo and his sons with 5 or 6 other men, who assaulted them and robbed them of their money. Harmanis also swore an affidavit, stating in it the actual truth, with the addition of a robbery and burglary committed on his property. Each was supported by false evidence, and both the complaints having been investigated by the Magistrate, both were dismissed by him, as neither appeared to him to be true. A few weeks after this, Harmanis with a party of his friends repaired to his enemy's house, and assaulted him and all his people with clubs, knives and rice-pounders (long wooden pestles), and many on both sides were severely wounded. The matter was tried before the Supreme Court, but the jury acquitted the accused. Then for a period of nearly four years the two families were engaged in a series of civil lawsuits arising out of certain bonds, in all of which judgment was given against Hendrick—bonds, which came into existence only after the rupture between the two families, Hendrick having never borrowed a farthing from the other on a bond or without a bond. And yet the deeds purported to have been duly executed before a notary! Before execution was granted in the last of these cases, the two sons of Harmanis were found one evening lying dead in a neighbouring rice field, with marks of violence on them: and although every possible exertion was made by those in authority to discover the murderers, no trace of truthful evidence could be had, and although a dozen relatives of the deceased swore to its being the work of Hendrick's sons, there did not appear any trustworthy evidence whatever against any one. The case was however tried upon the evidence of these relatives, but the jury at once acquitted the prisoners, Hendrick himself and his sons. In a few weeks afterwards every thing belonging to Hendrick was sold by

the Fiscal to satisfy the execution in the civil suits mentioned above, and as there still remained a large balance due, Hendrick was incarcerated in a debtor's prison. Harmanis lost both his sons, and got a considerable sum of money recovered upon his bonds, but did not live long enough to enjoy it, as in about a year's time he was poisoned, and died a miserable death. The suspected culprits were not brought to punishment, as there was not a tittle of legal evidence against them. Thus these two families, who had lived comfortably and respectably in their quiet village for a long time, were ruined; and other villagers, who had taken part in their quarrels, did not fare better. Certainly a Hooniyan Charm, viewed in this light, must appear to be a thing of greater malignity, than the Cattadiya and his books represent it to be in its direct consequences.

The following case is not less characteristic. It happened in a village not very far from Colombo. Andris had a lawsuit with Siman Nydey respecting a small piece of land, not worth more than £2 or £3, and judgment was pronounced in favour of Siman. Andris, resolving upon revenge, had recourse to witchcraft, and a Hooniyan being prepared, the image was buried at night in the yard of Siman Nydey's house, opposite to the front door. Unfortunately for Andris, he was detected in the very act, and was seized by the inmates of the house, who headed by Siman, joined in giving him a good thrashing. Not content however with this they cut off a bunch of plantains from a tree close by, and placed it beside Andris, who lay on the ground, bound hand and foot and smarting from the blows he had received. The Police Widhane was then sent for, and on his arrival Siman charged Andris with intruding into his dwelling garden at night and stealing plantains from it. All Singalese know well that Englishmen never punish people for practising Hooniyan or any other sort of witchcraft, and hence this fictitious charge of theft. The Magistrate tried the case, and the man being found guilty was sentenced to a month's imprisonment with hard labour. Before he could return home from the jail, his enemy Siman, wishing to pay him in kind, consulted a Cattadiya,

and got a Hooniyan ceremony performed against him. On his return from the jail, the first thing Andris heard was a rumour of Siman's having been seen going one night towards a graveyard in company with another man, who carried with him a cock concealed under his Saron cloth, together with some live coals in a broken chatty. Of course Andris immediately understood what it meant, and perhaps thinking within himself that "the best of all charms is a club-charm" (a popular Singhalese saying), the next evening about the time that Siman, who was a toddy drawer, generally returned home after drawing Toddy in the neighbouring hamlet, he shouldered his Mamottie (*Angliee* hoe) and walked along the path, by which he knew the other would come. When he saw Siman approach, he concealed himself behind a bush, and, as he passed, with a single blow of the Mamottie, struck him to the ground. The unfortunate man's skull was completely fractured, and he lived only 3 days. Andris was tried before the Supreme Court, and being found guilty, expiated his crime on the gallows. Even after this the two families had many quarrels and lawsuits, but none productive of consequences so serious.

A young man, who was a "rising" astrologer, fell sick, and his physicians did all they could for him, but without any effect. Day by day he grew worse, and was fast approaching his last end. From the first, the illness was attributed to demon influence, and nothing, that charms and Cattadiyas and Balicarayas and Buddhist Priests and Capuas could do, was left untried. The patient however grew no better, and at last he died. The suddenness of the disease, and the speedy death it resulted in, were matters of suspicion even in the minds of the neighbours, and much more certainly in that of the father of the deceased. The old man suspected another astrologer, who lived in the same village, of having practised Hooniyan Charms against his son, and all doubt was removed from his mind, when he heard a few days afterwards that a certain Cattadiya, who lived in a distant village, was seen, some three or four months before, going to the house of the astrologer late in the evening, and in such a manner as if he wished to go unseen. Whe-

ther this was true or a mere invention of some unprincipled villager, the old man did not care to enquire, he was but too ready to believe what he had all along strongly suspected. When he heard it, he was maddened with anger. He could not bear the idea of his beloved son being snatched away from him by foul play. He had taken great pains and had been put to considerable expence in training his favorite son to the profession of an astrologer, and to be thus suddenly disappointed, just as he was about to reap the reward of all his labours in the fame and glory of his son, was past all human endurance, especially the endurance of our old carpenter, who seldom raised his chisel or his adze without consulting an astrologer for an auspicious hour. The old man burning with rage and resentment, resolved to have his revenge. He had a neighbour who, being something of a sportsman, had a gun. He had also a mango tree in his compound, the fruit of which was every day devoured by monkeys, so he asked his neighbour for the loan of his gun to drive off these troublesome robbers. Every day, when monkeys were seen on or near his mango tree, he took out the gun, loaded it carefully, and first levelling it at the intruding monkeys, turned and fired it in a different direction ; for it was a great sin to kill animals, especially monkeys. Besides, he was an *Upasakaya*.\*

\* An *Upasakaya* is a religious Buddhist, or at least one who professes to be so, by the observance of certain precepts of Buddha called *Sil* or *Seela*. These precepts or obligations are.

1. Do not take away life.
2. Do not take that which is not given.
3. Do not commit adultery.
4. Do not speak that which is not true.
5. Do not use intoxicating liquors.
6. Do not use solid food after mid-day.
7. Do not attend at dancing, singing, music, and masquerades.
8. Do not adorn the body with flowers, perfumes, or unguents.
9. Do not use seats above the prescribed height.
10. Do not receive gold or silver.

Of these the first five, called *Pan Sil* or *Pancha Seela*, are considered to be obligatory on all. These five with the next three, forming eight Obligations, are called *Ata Sil*. One professing to observe these eight is called an *Upasakaya*.

So this sort of shooting at monkeys continued for three or four weeks. One evening, as the astrologer was returning home from another village, and was moving along a footpath flanked on both sides by thick bushes, he was shot by somebody concealed among the bushes and lived only a few hours. The Jury, who tried the old carpenter, at once acquitted him, as, although there was as usual a good deal of false evidence put in, which from its nature was not, and could not be, believed, there was not a tittle of trustworthy evidence against him, excepting the mere fact of his having had at his house a gun borrowed from a neighbour to shoot monkeys. But all the villagers knew to a certainty that the old man was the murderer.

Instances like the above can be multiplied by hundreds, if necessary ; but the few already cited will, we think, be sufficient to give the reader some idea of the nature of the evils, which a belief in the power of charms often produces among our countrymen ; a belief, which is not confined to those, whom we are in the habit of styling common people, but which prevails equally, though with less serious consequences, among Singhalese of a higher class and condition, with the exception of a very few well educated intelligent people, not exceeding, we firmly believe, four or five hundred individuals in the whole island.

There is a peculiarity, very general among the Singhalese, that if an European questions a Cattadiya about any particular department of his art, he will give just such answers, as he thinks will be most in accordance with the opinions of the querist, as far as it can be done without wholly condemning the entire system ; but whenever there appears to be no chance of avoiding this last dilemma, he will make every possible excuse to make a hasty retreat, without entangling himself in the difficulties of a discussion, in which he knows he will not be able to triumph. If an Englishman tells an advocate of Demonism that charms and Demon Ceremonies are mere follies ; that no benefit whatever can be derived from them ; that they are mere impostures intended to delude the ignorant ; and that the most learned Cattadiya cannot satisfactorily prove that they

possess any of the powers ascribed to them ; the answer most probably will be—"Sir, I don't know much about these things myself; my forefathers have believed in them, my neighbours still do so, and what is good for them cannot, I think, do any harm to myself. Possibly much of what you say may be true, and certainly a great deal of what now goes under the name of charms is spurious, and many of the Cattadiyas are ignorant impostures. Really, Sir, I don't understand these things well, but there may be some, who can perhaps satisfy you on the subject, though I cannot." Or he will say—"Sir, I don't know whether these things be true or false. When we fall sick, we try every means within our reach of getting better. We worship Buddha, the gods, and the demons, all at once, to take our chance of recovering from the sickness through the help of some of them. All my countrymen do so, and I am only doing like them." The demeanour of the man during this conversation is like that of one, who has been convinced of the absurdity of his worship, and who is anxious to profit by the advice of a superior, although he evinces considerable impatience at being stopped, and is anxious to get away as soon as possible. The moment he turns his back however, he will go away laughing at his own skill in answering so well and cursing, or at least pitying the Englishman for being an infidel and a Christian. Hence many an Englishman is led to believe that Demon Worship has not at present a firm hold of the minds of a portion of the people, and that it is upheld amongst a few merely because custom, or habit has made it familiar to them. Nothing can be more erroneous than this opinion; for so far from a portion of the people being indifferent to Demon Worship from a conviction that it is an absurdity, we believe there is not (excepting 4 or 5 hundred well educated men in the whole Island) one Singhalese man, who believes in any thing more firmly than in Demonism. In Colombo and its immediate neighbourhood alone, where the superstition does not command many *zealous* votaries, there are some few who have no great faith in charms, or who, though believing in them, have no opportunity of reducing that belief into practice in the form of Demon cere-

monies ; but in all other parts of the Island, Demonism exercises a more commanding influence over the every day life and thoughts of a Singhalese, than any other *ism* that we know of.

---



## THE FIRST DISCOURSE DELIVERED BY BUDDHA.

---

*Translated by the late REV. D. J. GOGERLY, Chairman of the Wesleyan Mission in South Ceylon, and presented for publication by the REV. R. S. HARDY, M. R. A. S.*

---

On the birth of the prince Gotama, according to the native authorities, it was known to certain Brahmins, from the signs they saw upon his person, that he would become a supreme Buddha. They themselves were too aged to expect to live until the time when he would attain to this high position; but they instructed their sons to prepare for places of privilege under the new dispensation. Of these young Brahmins, only five were obedient to parental advice. They retired to the forest of Uruwela, to await the assumption of the Buddhahood by the prince. Not long after Gotama had renounced the allurements of the palace, they met with him in the place of his retreat, and remained with him six years, hoping continually that the time in which he was to practise austerities would cease. But when this period had passed over, and the prince, as he had done before, began to carry the alms-bowl as a mendicant, without attaining the object for which he had become an ascetic, their patience was exhausted, and they left him, retiring to the neighbourhood of Benares.

It was the wish of Gotama, on becoming Buddha, to say *dharma*, or to preach, in the first instance, to Alara and Uddaka, two ascetics whom he had previously met with, whilst wandering in the forest; but when he learnt that they were already dead, he looked for the locality of the five Brahmins, and when he saw that they were near Benares, he repaired thither to open his commission as the all-wise teacher. They received him with reverence and worship. The preparations for this first sermon of the Tathagata

are described in the most glowing terms. "The evening" says a Singhalese author, "was like a lovely female; the stars were as pearls upon her neck, the blue clouds were her braided hair, and the expanse was her flowing robe. As a crown she had the heavens; the three worlds were as her body; her eyes were like the white lotus; and her voice was like the humming of the bee. To worship Buddha, and listen to the first proclaiming of the bana, this lovely female came." All the worlds in which there was sentient existence were emptied of their inhabitants, so that the congregation assembled was in number infinite; but when the god Sekra blew his shell, "all became still, as a waveless sea." Each of the countless listeners thought that the sage was looking towards himself, and speaking to him in his own tongue, though the language he used was Magadhi. Then Buddha opened his mouth, and preached the Dhamma-Chakkappawattana-suttan. This sermon is of importance, not only as being the first preached by Buddha; but as containing the germ thoughts of his entire system.

The following translation of this Discourse has been found among the papers of the late Rev. D. J. Gogerly, both the Pali original and the English translation being in his own handwriting.

"Thus I heard. On a certain time Buddhu resided at Benares, the delight of holy men and safe retreat of animals. At that time Buddhu addressed himself to the 5 priests. O Priests, these two extremes should be avoided by a Priest, an attachment to sensual gratifications, which are mean, vile and contemptible, degrading and profitless; or severe penances, which produce sorrow, and are degrading and useless.

"O Priests, avoiding both these extremes, Buddhu has perceived a middle path for the attainment of mental vision, true knowledge, subdued passions, the perception of the paths leading to the Supreme good, the preparation necessary for attaining it, and the entrance to Nirvana.

"O Priests, which is this middle path?

"This path has 8 divisions:—namely, correct doctrines, correct perceptions of those doctrines, speaking the truth, purity of conduct,

a sinless occupation, perseverance in duty, holy meditation, and mental tranquillity.

"This, O Priests, is the middle path, perceived by Buddha.

"This, O Priests, is the important doctrine respecting sorrow: there is sorrow in birth, in decay, in sickness, and in death, in separation from beloved objects, and in being compelled to remain with those which are disagreeable; there is sorrow in not obtaining the fulfilment of wishes, and, briefly, sorrow is connected with every mode of existence.

"This, O Priests, is the important doctrine respecting the continuation of sorrow: it is *desire*, which in transmigrations revels in sensuality and seeks enjoyment in whatever state it may be placed; it is the desire of pleasure, of continued existence, and of annihilation after death.\*

"This, O Priests, is the important doctrine respecting the destruction of sorrow: it is complete freedom from passion, an abandonment of sensual objects; a deliverance from the desire of a continuation of existence, a freedom from attachment to existing objects.

"This, O Priests, is the important doctrine relative to the path by which this state may be attained; this path has 8 divisions—correct doctrines, a clear perception of their nature, inflexible veracity, purity of conduct, a sinless occupation, perseverance in duty, holy meditation, and mental tranquillity. Relative to the important doctrine of sorrow being connected with all things, I, O Priests, possess the eye to *perceive* this previously undiscovered truth, the knowledge *of its nature*, the understanding *of its cause*, the wisdom *to guide in the path of tranquillity*, and the light to dispel darkness from it.

"O Priests, it is necessary that I should clearly understand this previously undiscovered and important doctrine, relative to which I have the eye to perceive; the knowledge, &c.

O Priests, this previously undiscovered doctrine that sorrow is

---

\* This passage stands as it is given in Mr. Gogerley's translation.

necessarily connected with existence is clearly understood by me, I having the eye, &c.

O Priests, relative to this before undiscovered doctrine of the cause of the continuance of sorrow, I have obtained the eye, &c.

O Priests, it is proper that I should remove from me the cause of the continuance of sorrow, relative to which previously undiscovered doctrine I have obtained the eye, &c.

O Priests, the cause of the continuance of sorrow no more exists in me, relative to which previously undiscovered doctrine I have obtained the eye, &c.

O Priests, relative to this formerly undiscovered doctrine of the destruction of sorrow, I have obtained the eye, &c.

O Priests, this formerly undiscovered doctrine should be fully ascertained by me, relative to which the eye, &c.

O Priests, this formerly undiscovered doctrine has been fully ascertained by me, relative to which the eye, &c.

O Priests, relative to this previously unknown doctrine respecting the path by which the destruction of sorrow may be attained, the eye, &c.

O Priests, it is proper that I should be accustomed to this path, concerning which the eye, &c.

O Priests, I am accustomed to this path, &c.

O Priests, was I not fully informed relative to these 4 doctrines which my wisdom thus perceived in 12 ways?—

At that time, O Priests, did I not know that I had acquired the most complete and irrefutable wisdom possessible in the universe.

From that time, O Priests, I have been fully informed relative to these 4 doctrines, which my wisdom has thus perceived in 12 ways.

At that time, O Priests, I know that I had acquired the most complete and irrefutable wisdom attainable in the universe.

This wisdom and knowledge have sprung up within me. My mental deliverance is permanent. This is my last birth: I shall transmigrate no longer

Budhu having spoken thus, the delighted priests were exceedingly gratified with the discourse.

When these doctrines had been thus luminously displayed, the venerable Kondanya becoming free from pollution, obtained the eye of wisdom, and a complete deliverance from the cause by which sorrow is continued.

When Budhu had thus declared these leading truths, the Gods of all the heavenly worlds, to the extremity of the Brahma Lokas, were heard proclaiming—Budhu has declared at Benares the irrefutable doctrines of truth, which could not be declared by Sage, or Brahmin, or God, or by Maraya, or by any person in the worlds. (the names of the principal gods in each world being mentioned.)

Thus at the same moment the sound ascended to the Brahma Lokas.

Thus the foundations of 10,000 worlds were shaken and moved about tumultuously, and a great and brilliant light burnt upon the worlds.

Then Budhu with a mellifluous voice said, most certainly the venerable Kondanya has acquired an experimental knowledge of these truths.

Thus he received the names of Annya Kondanya.

---

### POOTTOOR WELL.\*

It having been deemed desirable to investigate certain phenomena in connection with this well, the following experiments were made. This paper will contain no attempts to explain these phenomena, or to suggest any theory as a basis for discussion. Simply narrating facts, I leave it for others to determine the cause of the following effects.

As a guide however, I will venture to give an outline description of the Peninsula of Jaffna in which this well is situated, and of the appearance of the well itself with some general remarks on peculiarities noticeable in most of the wells of the Jaffna Peninsula.

The Jaffna Peninsula would appear to have been a comparatively recent formation and principally formed by gradual coral deposits. There would however seem to have been at some period or other, a volcanic agency which has upheaved strata of an earlier period, as the surface of large tracts consists of magnesian limestone, in which (whether worn or otherwise I cannot say) exist numerous fissures affording easy passage for an abundant supply of fresh water, within a very few feet of the surface.

This Peninsula is so free from elevations of any kind that the highest point found in its cross section was only 35 feet above low water level. Elevated ground is found at both sides near the sea, from which points the ground declines again leaving a table land almost entirely level 13 or 14 miles in extent, at an elevation above low water level of only 4 feet. This peculiarity during spring tides (of the North-east monsoon particularly) allows the sea to flow up numerous inlets, which seam the Peninsula in every direction and which rise during freshes to a height of 3 or 4 feet, and afford abundant opportunity for the manufacture of salt. It is worthy too of consideration in connection with the subject of the well, that, on subsiding, large deposits of naturally formed salt are left, which remain on the beds of the inlets throughout the year. Before leaving this subject, I might mention that the greatest width from north

---

\* I have been unable to find out the name of the author of this paper.

to south of the Peninsula is 20 miles, and its greatest length from east to west 30 miles.

The wells of Jaffna are subject to certain peculiarities. Their general level appears to be affected by the state of the tides, not however to such an extent as to cause a diurnal action. It is however a well known fact that during the north-east monsoon the wells of the district rise to their greatest height, and that height diminishes as the force of the monsoon decreases. The large mass of water in the Bay of Bengal affected by this monsoon causes the level of the Jaffna lake to be affected to the extent of 18 inches increase of tide, at the same time that the above-mentioned rise in the wells occurs. Another fact is, that cultivators in digging irrigation wells are obliged to observe the greatest possible caution, as after passing a certain depth the water becomes brackish, and this peculiarity exists throughout the Peninsula. Again it is equally curious to observe how closely fresh and salt water flow together without amalgamating. Whilst building a causeway at Vannatipalam across the salt inlet, in this Poottoor district, the foundations were laid in salt water, but close to this and in the centre of the inlet fresh water could be obtained in several places and in large quantities, although during freshes those spots are covered with 3 or 4 feet of salt water. These facts may prove of interest and of some use in considering any theory which may be based upon the results of the experiments, hereafter to be narrated.

The *Poottoor well* itself is a large rectangular pit in the limestone rock, and its dimensions are about 40 feet in length by 25 in width. A slope down to the water level has been made, as is common to all the artificial tanks of Ceylon and India. Tradition connects it with some springs on the Coast near Tondamanaar, but it is only tradition as it would be simply impossible to trace the course or source of any springs in so level a country. The only *previous experiments* made were in 1824, when engines of considerable power were employed, to raise water from the well, with a view of irrigating the district. The only result obtained however was the

establishment of the fact that it was impossible to affect the level of the well or to check the curious rise and fall of its water. This latter phenomenon has earned for it the title of the "Tidal Well of Poottoor."

I think I have now mentioned all the facts I am aware of, which might assist any one in forming an opinion as to the cause of the peculiarities of this well. These peculiarities are three in number.

First in importance is the tide above mentioned.

Secondly, the presence of salt water from a depth of between 45 and 50 feet to the bottom of the well, &c.

Thirdly, its apparent inexhaustibility. The experiments just completed were undertaken with reference to the two first conditions only, the experiments of 1824 being considered conclusive as to the third.

#### EXPERIMENTS.

The first step taken was, by a careful section taken from the low water mark on the southern to the low water mark on the northern shore, to ascertain the relation that the level of the surface water of the well bore to the tidal marks of the sea on both shores. Levels were taken for a distance of 17 miles from Jaffna on the south coast to Valvettytorre on the northern coast.

The fact so established is, that the level of the fresh water in the well coincides almost exactly with the low water level of the sea on both coasts.

The next experiment was conducted with a view of ascertaining at what depths the fresh water ceased and salt water commenced, and to procure specimens of the water at various depths to be sent to England for analysis. An instrument with a closely fitting valve was made for this purpose, so arranged that the valve could be opened and closed again at any given depth.

The first symptom of brackishness was found between 40 and 50 ft. down, and it appears certain that it is at this point that the salt water enters. Specimens of the water at the surface, 45 ft., 95 ft., 145 ft. (the bottom) were procured and put into sealed bottles.



The water from the bottom when first brought up, smelt strongly of sulphureted hydrogen.

The surface of the fresh water is 14 feet below the ground line, and the total depth of the well varies between 140 and 145 feet.

Dr. Ferguson of the Army Medical Staff kindly assisted me in making these experiments.

It being desirable to ascertain how far the tide in the well coincided with that of the sea on both coasts, Dr. Ferguson and myself at the well and two assistants at Jaffna and Valvettitorre respectively, took notes at every half hour from 6 A. M., till 6 P. M.

The following is a tabular statement shewing the rise and fall of the tide observed at all three places in inches.

Time.	Jaffna Lake.	Well at Poottoor.	Valvettitorre.
6 A. M.	0	0	0
6:30	Fell .60	Fell .12	Fell .36
7:0	" .60	" .06	" .60
7:30	" .84	" .06	" .84
8:0	" .96	" .06	" 2.04
8:30	" 1.08	" .06	" 2.64
9:0	" 1.32	" .06	" 3.12
9:30	" 1.44	Rose .03	" 2.40
10:0	" 1.08	" .15	" 2.40
10:30	" 1.08	" .12	" 2.40
11:0	" 1.20	" .12	" .96
11:30	" .72	" .12	" .48
12:0	" .84	" .18	Stationary { low water
12:30 P. M.	" .84	" .06	
1:0	" .60	" .06	
1:30	" .60	" .06	.96
2:0	" .12	Fell .15	.96
2:30	Rose .24	" .18	1.92
3:0	" .48	" .18	3.28
3:30	" .96	" .12	1.68
4:0	" 1.56	" .12	1.20
4:30	" 1.08	" .12	1.92
5:0	" .72	" .12	1.44
5:30	" 1.08	" .12	.24
6:0	" 1.20	" .48	.24

By the foregoing table it will be observed that the well alternated 3 times during the day, whilst the sea was not affected to a similar extent.—The well also rose whilst the sea fell, and this part alone destroys all hypotheses that I have as yet heard discussed.

The subject therefore remains in an unexplained state and offers a field for scientific enquiry and discussion.

---

*On the air breathing Fish of Ceylon—By The REVd.*

PRINCIPAL BOAKE.

Having been recently induced to make some experiments on the respiration of certain species of fish, in order to ascertain the correctness of a statement of mine which had been communicated to Professor Huxley by Sir Emerson Tennent, I am under the impression that an account of those experiments with a description of the habits of the fish in question, will come within the scope of the Asiatic Society's operations, and may perhaps be deemed by the Committee to possess sufficient interest to entitle a paper on the subject to admission into its Journal.

During my residence in England in 1855—1856, I became acquainted with the facilities which recent discoveries, or, to speak more accurately, the ingenious application of old discoveries to the construction and management of *aquaria* had afforded to those who wished to observe the habits and natural history of the various tribes of aquatic animals. Knowing that very little attention had been paid to that branch of natural history in Ceylon, I lost no time, on my return to the Island, in establishing a fresh water *aquarium*; and, in watching the proceedings of its inhabitants, my attention was very soon attracted to a peculiar habit which some of them had, of ascending at nearly regular intervals to the surface, so as to bring the mouth for an instant in contact with the air. That habit is particularly conspicuous in the fry of two species, viz., the Loola and the Maddecariya, which speedily cover the surface of the water in which they are confined, with small bubbles of air or gas. I noticed also that the species of fish, to which that habit belonged, were much less sensitive to any impurity in the water in which they were confined than were those which did not pay periodic visits to the surface. Had I been a practised natura-

list these circumstances would probably have led to my discovering at that time the fact that the fish, in which they were observed, are air breathers, and as incapable of supporting life by breathing water, and as liable to be drowned by being kept from access to atmospheric air, as the whale or the seal or the turtle; but, not being much accustomed to such investigations, I failed to perceive the conclusion to which these habits obviously pointed. About the same time, I learned from the natives, that there were certain species of fish, generally inhabiting swamps and paddy fields, which, when dry weather deprived their usual haunts of all their moisture, were in the habit of burying themselves in large numbers in the mud, and remaining there in safety even after a sod had been formed by the growth of grass on the surface.

With the intention of verifying that statement, I caused a very large earthen vessel to be made, which I nearly filled with mud, leaving a few inches of water on the surface. In this I placed a number of those species of fish which were stated to bury themselves in the manner described, expecting that they would act in the same manner in captivity as they were said to do in their natural state. It is obvious however, that the conditions were not similar—The evaporation in my experiment was confined to the surface, whereas in a paddy field the moisture may be supposed to escape in all directions and not from the surface only. Again, in the paddy field, grass would begin to spring up while the surface was still covered with water, and before the strictly aquatic vegetation had disappeared; and a constant influence would thus be exercised in keeping the water first, and the mud afterwards, free from putrefaction. It is not to be wondered at therefore that all the specimens of fish which I subjected to that experiment died long before a sod was formed on the surface of the mud; but they survived for several days after the water had all disappeared from the surface by evaporation, and continued to manifest so much vigour as to bespatter, in a very unpleasant manner, any person who approached them incautiously. The result of that experiment was, therefore, merely to confirm what was already known to naturalists,

viz., that the fish experimented upon, were possessed of respiratory powers which enabled them to exist in mud so thick that it would be impossible for it to pass through their gills, and that they are capable under such circumstances of breathing atmospheric air, which they obtain by elevating their mouths to the surface.

For some years, I paid no further attention to the subject; but happening, in a correspondence with Dr. Templeton, to mention the alleged fact of these fish burying themselves in the mud in large numbers, I was requested by him to make further inquiries on the subject, the result of which was, that all the natives of the low country, with whom I communicated on the subject, confirmed the statement; while a friend, whom I requested to make similar inquiries in the neighbourhood of Badulla, was not able to discover that the natives of that district were acquainted with any such peculiarity of the fish inhabiting their paddy fields.

I have not, however, been able satisfactorily to verify the statement that they are ever found in dry earth, although I have repeatedly offered a reward to any one who will let me see the operation of digging fish out of such earth; and the result of a visit which I paid to Moottoo Rajawelle, during the dry weather, when the swamp was in a favourable state for it, in August last, had the effect of making me suspect the truth of the statement, that they are ever so found. The difficulty which I experienced on that, which was my second visit to Moottoo Rajawelle, in procuring any satisfactory information, affords a curious illustration of the suspicious character of the Native Singhalese, and of the difficulties which it presents to the satisfactory prosecution of any investigation, the nature and objects of which are not easily made intelligible to them. My former inquiries, which were made more than twelve months before (of which an account is given below), were recollected, and as the inhabitants of the swamp were incapable of conceiving the possibility of my being actuated by purely scientific motives, they came to the conclusion that I had been deputed by Government to inquire into the value of their fishery, with the intention of imposing a tax upon it; and the consequence was, that instead of being allowed

the same facility of observation as in my former visit, I was taken to a part of the swamp which had been fished a few days before, and in which, consequently, only one or two very small fishes were taken while I was present. My first visit to Moottoo Rajawelle was paid in April 1862, and was much more satisfactory in its results.

The swamp of Moottoo Rajawelle is not less, I imagine, than 30 square miles in extent; being, as well as one can judge by the eye, fully ten miles long, by three broad. The Negombo Canal runs through it, and must contribute in some degree to keep the water in the swamp at a more nearly uniform level than would otherwise be the case; but, notwithstanding any influence of that kind which may be exercised by the canal, there are, I believe, very considerable variations in the height of the water at different seasons. At the time of my first visit, very little water was visible in the swamp, nearly all the surface being covered with rank grass, which had formed a nearly continuous sod over it. Beneath that superficial sod were about two feet of water, or rather of diluted mud, about the consistency of thick Pea Soup, and beneath that again, a solid vegetable deposit very much resembling that which is used as fuel in Ireland under the name of turf. I was at first unable to account for the water being so muddy, as it might be expected that in water, so perfectly still as to have a sod growing over its surface, the earthy particles would soon subside and leave the water clear. The phenomenon is, I believe, to be accounted for by the large number of Hoongas and Magooras which inhabit it, which by the perpetual motion of their ribbonlike bodies keep the mud in constant agitation. So perceptible was this effect in the case of some which I had in confinement, that I found it necessary, in order to maintain the clearness of my *aquarium*, to exclude them from it altogether. The sod, with which the muddy water was covered, was firm enough to support the weight of natives, several of whom were engaged in cutting the long grass for their cattle, while on some of the firmer parts bullocks were to be seen grazing. Thus the singular phenomenon was exhibited of an extensive plain, on the

surface of which men and cattle were moving about, while beneath the surface were quantities of fish, several of which I saw captured.

The mode in which the natives catch those fish is very peculiar, and is in fact an ingenious application of their knowledge of the fact, that they cannot long exist without atmospheric air.

When the swamp is in a proper state for such operations, *i. e.*, when the water is neither too high nor too low, and the surface is covered, as I have described, with a firm sod having two or three feet of diluted mud beneath it, a native goes out at night, when the air is still, and walking through the swamp, listens for the peculiar sounds which the fish make in breathing. Having selected a part in which those sounds are heard so frequently as to afford a prospect of catching a considerable number, he proceeds to remove the sod from a few circular patches, each about three feet in diameter, in those places, in which there already exist small holes in the sod, which the fish frequent for the purpose of breathing. When that is done, he returns home for the night. I did not think it necessary to be present at the nocturnal part of the operations; but I accompanied the fisherman the following morning to the spot which he had prepared during the previous night; and I found it a most laborious effort to make my way over the treacherous surface, although the natives appeared to traverse it without any difficulty. When we reached the fishing ground, operations were commenced by making a kind of enclosure, to cut off from the rest of the swamp that portion in which the circular patches had been cleared of sod the night before. This was done by breaking the sod in a narrow line encompassing the space which it was intended to enclose, and trampling a portion of it down to the more solid mud at the bottom. The long grass, which is thus carried down, makes a kind of fence, which is supposed to confine the fish; but which one can hardly suppose to be very efficacious, as they would have but little difficulty, if so inclined, in making their way through it. When this is done the diluted mud in the holes that have been opened over night is thickened by mixing it with some of the more solid

mud, or peat, scooped up from beneath. Some of the long grass which grows on the surface is then laid over the thickened mud in two strata, the stalks of which the one is composed being at right angles with those composing the other. The whole is finished off with a coating of mud. Nothing then remains to be done, but to watch for the appearance of fish. The first indication of their presence is the rising of bubbles of air; and in each instance when these bubbles appeared, the natives, who were standing by, named correctly the species of fish by which they were emitted, being guided probably by their size, and by their coming up singly or in larger numbers. After a bubble of air has appeared, but a short time elapses before the head of a fish appears protruding above the surface of the mud. There is no difficulty in securing a fish when he shows himself in this way, as the blades of grass, which have been arranged so as to cross each other beneath the surface of the mud, form a net through which he cannot readily force his way back.

I remained watching the process for about an hour, during which I saw eleven fish taken, and the natives told me, that, as the day advanced, larger fish would be caught, and in greater numbers. None of those that I saw taken were large. They were of three species—*Connia* (*Ophio-cephalus*) *Magoora* and *Hoonga* (*Siluroids*.)

It is obvious that this mode of catching the fish is entirely based upon the fact that they cannot breathe water, but are forced to ascend at stated intervals to the surface, to breathe atmospheric air—a fact which after I had verified it by drowning two or three specimens by inverting a net over them, I communicated to Sir Emerson Tennent, who in his reply forwarded to me a copy of a letter from Professor Huxley, which contains the following passage. “Your correspondent’s experiments on the respiration of the fish are most interesting, and I trust he will continue them. It would be a great fact should he establish the point he seems to be aiming at, viz., that these fish habitually breathe air rather than water.” I had already fully satisfied myself of the fact of which Mr. Huxley



here speaks; but, in order to put the matter beyond doubt, I repeated my experiments on a larger scale, in the presence of several gentlemen who were so kind as to assist me, some of whom favoured me with suggestions which enabled me to make my experiments more satisfactory, by varying the manner in which they were made.

The first set of experiments was made in the presence of C. P. Layard, Esq., and G. Molesworth, Esq. On that occasion the fish experimented on were enclosed in glass receivers, which were submerged in larger vessels containing other fish, which had free access to the air. From some of the receivers, the fish inclosed in which were so large as not to be able to make their escape through the aperture, the stoppers were removed, so as to allow a free communication between the water inside the receiver and that outside. In others, in which smaller fish were inclosed, the stoppers were replaced, as soon as the air had been allowed to escape but, were from time to time moved up and down, so as to promote the circulation of the water between the receivers and the aquarium in which they were placed. The fish confined in these receivers were of five different species, viz., Maddhacariya, Loolla, Talcaddia, Kawayya, Hoonga. Messrs. Layard and Molesworth remained for about an hour and a half to watch the experiment. During that time two Loollas and two Talcaddias were drowned, one Talcaddia survived after having been kept from the air for 50 minutes; and a Maddhacariya, which had been confined for more than an hour. when an attempt was made to remove it, revived immediately on obtaining access to the air, and swam off so vigorously that it was impossible to distinguish it from other fish of the same species which were in the *aquarium*. When Messrs. Layard and Molesworth went away, there still remained two receivers with fish in them, which continued to shew signs of life. One contained a Kawayya, the other a Hoonga. These were left unobserved for about two hours, when they were removed quite dead. In some of the receivers several Tittiyas (water breathing fish,) were confined, along with the air-breathers, and did not appear to have suffered in the least, when their companions were removed dead.

The second set of experiments was tried in the presence of the Revd. G. Schrader, Revd. W. F. Kelly, and W. J. Sendall Esq., Mr. Molesworth having suggested that the death of some of the fish formerly experimented on, might have been accelerated by the alarm experienced by them on finding themselves confined in so small space as that of a glass receiver, it was determined to attempt to keep the fish from access to the air, in this second set of experiments, by means of diaphragms fastened a couple of inches beneath the surface.

Two vessels were employed. One was the bell glass of a hanging lamp. In it were two *Connias* and two *Loolas* (both air breathers,) and about fifteen or twenty *Tittyas* (water breathers). These fish had been in the bell glass for some days; but were evidently too much crowded, as the *Tittyas*, although the water was frequently changed, were constantly at the surface breathing air, as such fish will do when the water becomes impure. The diaphragm in this case was a circular piece of tin, perforated with small holes. The other vessel was a tank or aquarium of the following dimensions, viz. 36"  $\times$  16"  $\times$  12 inches. In it were a considerable number of fish, both air-breathers and water-breathers. A diaphragm of Mosquitos net was stretched across it, about two inches below the surface, by means of pieces of rattan. These arrangements having been made, the fish were left undisturbed for upwards of an hour. On their being examined at the end of that time, all the air breathers in the bell glass were found dead; but so also were about one half of the water-breathers, whose death was probably attributable to the fouling of the water, the volume of which was not sufficient for the support of so many fish, especially when they were cut off from all communication with the air.

In the larger vessel, the diaphragm was found to be imperfect; several of the fish, both air-breathers and water-breathers, had made their way into the space above it, and it is probable that some of those which were found below it, when the vessel was examined, had, during the course of the experiment, passed repeat-

edly backwards and forwards between the space above and that below the diaphragm. Two, however, were quite dead, a Loolia and a Maddhacariya, both air-breathers. None of the water breathers in this vessel had died.

These experiments not being satisfactory, in consequence of the imperfection of the apparatus, it was determined to repeat them, with a more perfect diaphragm, and a quantity of fish better proportioned to the volume of water in which they were confined.

The diaphragm was extended about six inches below the surface dividing the aquarium into two compartments, in the lower of which were confined specimens of Maddhacariya, Hoonga, Magoora, Connia, Loola, Kawayas, and Poolootta, all air-breathers, together with six Ancootas, water-breathers. In the upper compartment, separated from those below only by a diaphragm of mosquito net, were placed Maddhacariyas, Kawayas, Hoongas, Conniyas, and Ankootas. In this compartment there were also aquatic weeds, and a siphon was kept running for the greater part of the day, so as to change the whole body of water frequently while the experiment was going on. The diaphragm was fastened in its place about 11½ A. M., in presence of Mr. Layard. Very soon after the fish in the lower compartment were cut off from communication with the air, they began to emit bubbles of gas, and it was remarkable, that, while the air bubbles which were carried down through the mosquito net along with the fresh water from the siphon, made their escape at once back to the surface, the bubbles of gas emitted by the fish were detained by the net, shewing that the air had undergone a considerable change while detained in their systems.

Notwithstanding the pains which were taken to secure the diaphragm, one of the Pooloottas, and one or two of the Conniyas contrived to escape into the upper compartment; the remaining Poolootta, after having been confined for about three hours, began to manifest great uneasiness, and contrived by a desperate effort to force himself through a hole in the net, which did not appear to be large enough to allow a fish of one quarter of his size to escape.

The diaphragm was removed at 6½ P. M., in presence of Messrs.

Layard and Molesworth. All the fish in the upper compartment were alive and healthy, as were also the six Ancootas in the lower compartment. Two small Hoongas likewise appeared vigorous; and a large Hoonga which was nearly exhausted, revived immediately on obtaining access to the air. All the Káwayyas, twelve in number, were dead, also six Maddhacariyas, three Magooras, one Loola, and one Cooniya, being the whole number of each of those species that had been confined beneath the diaphragm.

The different degrees of tenacity of life which were manifested, in the course of this experiment, by the different species, and by different individuals of the same species, were very remarkable. Contrary to my expectation, the first fish that succumbed was a Káwayyah, (*Anabas*) which turned over on its side at half-past twelve, about an hour, or an hour and a quarter after the commencement of the experiment. At a quarter to one, several Káwayyas were on their sides, while a Loola, which, from the result of former experiments, I had expected to die first, continued in its ordinary position, and apparently alive. At three o'clock, two of the Káwayyas were still alive, while all the rest had turned over on their sides nearly an hour before. I attribute the great length of time required on this occasion to kill the fish, as compared with the result of former experiments, partly to the greater volume of water contained in the *aquarium*, and partly to a constant stream of fresh water being allowed to fall into it during the earlier part of the experiment, which carried with it minute globules of air. That stream was, however, discontinued about two o'clock, as it seemed that the Ankootas did not require it.

The struggles of all the air breathing fishes, and especially of the Káwayyas, to get up to the surface were very violent; and their breathing through their gills became after some time very laborious. This was the more remarkable, because these fish, when they have access to the surface, are remarkable for keeping their gill-covers perfectly motionless. This was especially observable in the Hoon-gas, which survived the longest; and I infer, that, although none of these fish can live long, when prevented from rising to the sur-

face, yet their gills are so constructed as to enable them to extract some oxygen from the water, and thus to prolong their existence, although not a sufficient supply to enable them to dispense altogether with access to the atmospheric air.

Notwithstanding the success of the experiment just described, there were two species of fish, which, from their habits, I believed to be air-breathers, but which I had not succeeded in drowning. To complete the investigation, therefore, I enclosed, on a subsequent day, two Poolloottas, two large and two small Hoongas, and two Ankoottas, in receivers, from which all communication with the air was cut off. The Ankoottas, being water breathing fish, were included for the purpose of proving that the others died solely in consequence of their exclusion from the air. Both the Poolloottas died in less than a quarter of an hour. The larger Hoongas died in about four hours. The smaller Hoongas were alive at the end of six hours, when it was thought necessary to remove the dead fish, during which operation the surviving Hoongas had an opportunity of obtaining a fresh supply of air. They were then enclosed again, along with the Ankoottas, and at the end of seven hours were found quite dead, the Ankoottas, which were confined along with them, being alive and apparently vigorous.

I think I have thus established, with regard to eight species of fish, inhabiting the marshes of Ceylon, what Professor Huxley states would be a great fact, if established, viz., that they habitually breathe air, and are incapable of surviving, for any length of time, if excluded from it; and I have the pleasure of presenting you with specimens, for your Museum, of those species which have been actually drowned in the manner described.

The delay, which has occurred in the publication of the Society's Journal, enables me to add the following extract from a paper which I drew up some time ago, giving an account of a singular circumstance, which I have ascertained since the previous part of this communication was written, in the natural history of another species of fish, a water-breather, and, I believe, a Siluroid.

"Having occasion to visit Caltura periodically, I was told, on one of

my visits, of a fish which is caught at certain seasons in very large quantities, and which has the singular habit, when held up by the tail, of emitting from the mouth a quantity of eggs. So great is the number thus emitted, that, when many fish are captured, the eggs are eagerly collected from the bottoms of the boats, and carried away to be fried, and are greatly relished by the villagers when so prepared, while the fish themselves, being too numerous to be consumed in their fresh state, are salted and dried, and often form an ingredient in the carries which appear at our tables."

"The description, which I received of the manner in which the eggs are procured, seemed to point to the conclusion, universally believed by the natives, that the regular mode of bringing forth their young is, in the case of these fish, through the mouth; a fact which seemed to me to be so singular, that I determined to stay a day or two longer at Caltura, when I next visited it, for the purpose of investigating the circumstances which seemed to indicate so singular a conclusion."

"The result of my investigation was, as might have been expected, that I ascertained, that the circumstances had not been fully or accurately observed, and consequently that the conclusion, to which they pointed, was erroneous; but I, at the same time, satisfied myself of a fact in the natural history of those fish, which will perhaps be regarded as but little less extraordinary, than their 'novel' mode of parturition would have been, if it had been established as true; and which, as Ceylon has acquired some notoriety for marvellous stories respecting its Zoology, I should feel some hesitation in stating, were it not, that, in addition to the abundance of unexceptionable testimony, I was able to procure specimens illustrating the whole extraordinary process."

"These fish produce their eggs, in the first instance, very much in the same manner as other inhabitants of the waters do, with this exception, that the eggs seem to come to maturity in batches of ten or twelve. Bottle No. 1 will illustrate this. It contains the roe of one out of a large number of fish that I examined. You will perceive that, besides eight or ten large eggs, there is a whitish

mass, which, on being closely examined, will be found to consist of other eggs of very minute size, the difference in size between those which are ready for emission, and the others which are immature, being very remarkable. The strange fact, however, is that the large eggs, on being emitted, are immediately taken up, either by the fish that has laid them, or by another of the same species, and, not swallowed, but kept in the mouth, until they are hatched, and the fry are able to take care of themselves, a period of some weeks, during which it is impossible that the fish, which is swimming about with so extraordinary a mouthful, can swallow any food, except such small nutritious particles as may be floating about in the water. When these fish first make their appearance at Caltura, in the beginning of the season, they are said to be so fat, that the curry made with them resembles that made with pork; but after swimming about for a few days, with their mouths full of eggs, they become dry and insipid. In bottle No. 2, you will see thirteen eggs, which I shook out with my own hands from the mouth of a fish of eight or nine inches long, each egg being about the size of a small grape. Preserved in that manner, viz., in Glycerine, the eggs retain their natural colour and transparency, whereas in spirit they soon become opaque. In the same bottle are some other eggs, which were obtained by pressure, and which present the same remarkable difference in size as those in No. 1. You will perceive that these latter are perfectly transparent, the smaller ones being scarcely visible, whereas those which were shaken out of the mouth of the fish contain a perfectly formed embryo, and have a system of blood-vessels spreading over their surface on one side. In bottle No. 3, you will see one of the eggs in a more advanced stage of development. Both the head and tail of the embryo have escaped from the egg, which, very little diminished in size, remains appended to the middle of the fish, giving it a very distorted appearance."

"This adherence of the egg to the young fish, after it has been hatched, is not peculiar to this species. The same thing occurs in the case of the Salmon fry, which are being produced, under the

auspices of Mr. Buckland and other eminent pisciculturists, in such quantities as to give us some grounds for hoping that that delicious fish may become again so common in the rivers of England, that it shall no longer be a luxury accessible only to the wealthy, and that farm-labourers may again, as is said to have been formerly the case in the neighbourhood of Newcastle, find it necessary to stipulate, in their engagements with their employers, that they shall not be fed on Salmon on more than two days in the week."

"This is the only specimen I was able to procure in that stage of development, the time not having then arrived for the general hatching of the eggs; but an intelligent friend, who is at Caltura at present, has promised to procure me other specimens, which will, I trust, enable me to ascertain a fact which I am inclined to believe, although I am not as yet prepared to assert it positively, namely, that the egg so appended is, in fact, the stomach of the animal in the state of enormous distention, and that, as its contents are absorbed, while the other parts of the fish grow in size, it gradually assumes a more natural proportion to the rest of the body.\* To this conclusion I am led by observing the system of blood vessels, which is perceptible on the side of the egg opposite the embryo, and which certainly looks as if it was intended to form part of the organization of the future fish." I have since ascertained by the aid of Wm. Ondaatje, Esq., Asst. Col. Surgeon, that the fish which carry the eggs, and subsequently the young fry, for so long a time in their mouths, are all males.

The name, by which these fish are known to the natives, is *Anguluwa*. They are regarded by them as all belonging to the same species, nor would an unscientific observer be likely to discover any specific difference between any of the specimens that I have seen; but having sent several specimens to F. Layard, Esq., I received a letter from him, in August last, in which he informed me, that he had submitted the specimens which I sent him, to Dr. Gunther of the British Museum, who had ascertained that they

---

\* This has since been fully ascertained to be the fact.



belong to two distinct species, both new, of the genus *Arius*. Mr. Layard further tells me, that the carrying of the ova in the mouth is not so novel a phenomenon as I supposed it to be, Dr. Gunther having described that peculiarity in the propagation of the Genus *Arius*, several years ago, from S. American species.

---

*On the 'Origin of the Sinhalese language.' Read before the  
Ceylon R. A. Society on the 31st October, 1863.—By*

JAMES ALWIS, Esq., M. R. A. S.

~~~~~

When twelve years ago I published the *Sidatsangarà*, and entered into an investigation of the question as to the origin of the *Sinhala* language, I intimated my belief,\* that it belonged to the Arian or Northern family, as contradistinguished from the *Dravidian*, or the Southern class of languages. My sentiments on many a collateral subject have since undergone change. I have discovered errors upon several points on which I then wrote. I find I have assumed facts which have no foundation. I have drawn inferences which are untenable. But the main question, the belief of which I then expressed, has only received confirmatory proof in the course of my later researches; and they enable me, moreover, with due deference, but great confidence to disprove the statement in Sir Emerson Tennent's History of Ceylon,—that 'the Sinhalese, as it is spoken at the present day, *and still more strikingly as it exists as a written language* in the literature of the Island, presents *unequivocal proof* of an affinity with the group of languages still in use in the Dakken;—Tamil, Telingu and Malayalim.†

Sir Emerson Tennent was, probably, indebted for this information to Professor Lassen,‡ and he to Professor Rask of Copenhagen—all of whom were not conversant with the Sinhalese.§

---

\* See Introd. to the *Sidatsangarà*, p. xlv.

† Sir Emerson Tennent's Ceylon, p. 328.

‡ See his S. Ind. Alterthumsk, p. 363.

§ Professor Bachflingk, lays down as a philological axiom that "it is dangerous to write of languages of which we do not possess the most accurate knowledge."

When more than forty years ago Rask wrote, the greatest misapprehension prevailed amongst Europeans on all Oriental subjects. Eastern Languages were not extensively cultivated. A gloom enveloped the science of comparative philology. Inaccessible was the path to eastern history. Even the *Sanskrit*, the language in the highest state of cultivation now-a-days, was then but imperfectly known to the European world. Some considered it a derivative of the *Zend*, and others treated it as a creature of the *Pāli*. Little, if any thing, was definitely investigated of the latter. The relation which the Sanskrit bore to the *Prākṛit*, was very imperfectly investigated; and was, at the time Wilson translated *Vikrama and Urvasī*, 'far from being understood'; and, when the labours of Lassen and Burnouf brought to light the Nepal books of Buddhism, even the names of their *Pāli* versions were unknown in Europe. The distinction between the *Arian* and the *Dekkane* groups of languages was not well ascertained. The Tamil was supposed to have been an off-shoot of the Sanskrit. The *Andhra* merely existed as a book name. Between it and the *Dravida* no relationship was established; much less was the identity of *Dravida* and *Damila* recognized. The Sinhalese was not known in Europe. Nor was it cultivated by the English in Ceylon until after the annexation of the Kandian Kingdom (in 1815) to the possessions of the British Government. Even then little was ascertained of the *Sinhala* by a careful inter-comparison of south-Indian dialects;—less was known of the various modifications which the former had undergone;—and least of all regarding its history for upwards of two-thousand years. True it is indeed that Mr. Chater published a Sinhalese grammar in 1815; yet this led to no important results in point of *philological* researches. The language adopted in it was the bastard Sinhalese of the fourteenth Century. It was the language of the paraphrases—the Sanskrit, if I may so call it, *Sinhalicised*. When, therefore, Clough published his Dictionary fifteen years afterwards, he was led away with the belief

---

\* Spiegel's *Kammavâchâ*.—Intro: p. i.

that 'the *Sinhala* was derived from the Sanskrit.' He moreover perceived not the identity of the *Elu* with *Sinhala*; nor could he distinguish the *Pāli* forms in the ancient Sinhalese from the *Sanskrit* forms which predominated in our modern dialect. One would have supposed that the share he had had in the publication of the *Bālavatāra* could not fail to enlighten him on the subject. But such, unfortunately, was not the case. He recognized 'the elements of two distinct dialects, in the national language of Ceylon. One he pronounced the *Elu*, and the other the *Sinhala*. The former he regarded as 'the remains of the language originally spoken, i. e. by the aboriginal inhabitants; and the latter, as the language introduced after the Vijayan conquest.\*

The subsequent labours of the Rev. S. Lambrick (1834), as well as those of an anterior date (1821) of the Rev. John Callaway were of little avail. The Dictionary of the latter was intended for elementary schools. The Grammar of the former, by his adoption of the forms of language current amongst the vulgar, rendered but little assistance to the Philologer. His denial, moreover, of the existence of the *passive voice*, which he must have daily found in the Sinhalese Version of the Lord's prayer, only gave those who placed the Sinhalese in the South-Indian class an additional handle in support of their incorrect theory.

*History*, too, was then in its infancy. Upham's works published in 1833 tended rather to mislead than to direct the European mind. No effort was made to set Sinhalese history in its true light until Turnour entered the field of Oriental literature. The commencement of true historic knowledge may be regarded from the date (1837), when he published the *Mahavansa*, and exhibited the value of the *Pāli*, not only in regard to chronological and historical researches, but also in point of philological investigations. †

---

\* For explanation of the terms *Elu* and *Sinhala* see *Sidatsangarā* p. xxvii et seq.

† The learned author of the *Dravidian Comparative Grammar* in fixing the date of Dravidian Civilization preparatory to an investigation into the origin of the Dravidian language, says: 'I am inclined to look to Ceylon for the best means of arriving at an approximate date.' p. 81.

Yet, it may be truly said that no one applied his energies to glean the information, which our historical works afforded to investigations connected with the language of the Sinhalese. Dr. Stevenson of Bombay has written several papers in the pages of the Bombay Asiatic Society's Journal; but they are by no means calculated to assist Philological investigations.\* Even the Rev. Spence Hardy, with a very intimate acquaintance with the Sinhalese, could not trace the origin of that language.† Indeed in times later still (1853) when the *Sidatsangarā* appeared, I confess, I was not able, with all the assistance of European and Asiatic researches then at my command, *definitely* to state the origin of the Sinhalese.‡

It was upon the publication of that Sinhalese Grammar, however, that people, in later times, began to pay greater attention to a critical study of the *Sinhala*. Since then has appeared an invaluable auxiliary to the investigation in hand—"The comparative Grammar of the Dravidian language by the Revd. R. Caldwell (1856). Since then too has arisen a greater thirst for a knowledge of the archæology of Buddhism; and, what is inseparably connected with it, the Pâli language. These helps combined with the light which History has shed upon the subject, and the knowledge already possessed by them of the Sanskrit, have enabled the native pandits in our own island to investigate with success the origin of the *Sinhala* language: and those investigations establish, as I purpose to show in a paper which I shall hereafter present to this Society in continuation of these introductory remarks, a result, the very opposite of that which Sir Emerson Tennent states as being founded upon "unequivocal testimony," or which Prof: Spiegel considers, is supported by *certissimis testimoniis*.§

Professor Lassen in his *Indische allisthumus kunde*, a work designed to be a critical digest of all the researches of the last

---

\* 'In many instances Dr. Stevenson's lexical analogies are illusory and disappear altogether on a little investigation.' Caldwell's *D. G.* p. 40.

† Ceylon A. S. Journal.

‡ See Introduction. p. xxiv.

§ *Kammavâchā* Introd: p. vii.

sixty years, relative to the antiquities of India, in speaking of the languages of the Dekkan viz. the *Tulva*, the *Malabar*, the *Tamil* the *Telugu*, the *Karnāta*, and the *Sinhalese*, sums up their relations to the Sanskrit as follows:—

‘A more critical investigation of the languages of the Dekkan has shown that they have been enriched from the Sanskrit, but are *quite independent of it* as to their origin. Their phonetic system is distinct, and so is the fundamental part of their vocabularies, embracing the words in most common use ; and farther, what is decisive, their grammatical structure is peculiar. With this philological fact accord the traditions of the Dekkan, indicating, as they do, that the Dekkanese were originally in a rude state, and that settlers from the North brought to them their civilization. The traditions of the continent agree here with those of the island of Ceylon, and the phenomena of the religious and political state of the Dekkan, at the present time, establish the fact of its having received its civilization from that source. Its alphabets, also, came from the North. Yet, certain peculiarities are likewise found, which, not being referable to Arya teachers, must be considered as remains of usages properly belonging to the South-Country. Nor has the civilization brought from the North penetrated every where: many tribes are met with in the Dekkan, which have adopted only a part, sometimes more, and sometimes less, of the imported culture; one indeed, that of the Tudā on the Nilgiri, had, until within a short time, received no such civilizing influence.\*’

With all the respect due to so distinguished an orientalist as Pr. Lassen, I cannot but regard his remarks, so far as they relate to the *Sinhalese*, as inapplicable, and therefore inconsiderate.

It is quite true that the Sanskrit element, by which I mean the use of sibilants, aspirates, double letters etc. in the modern *Sinhalese*, cannot be traced to our ancient dialect; and that these have been engrafted on the *Sinhalese* in comparatively modern times.†

---

\* S. Ind: Altnth. p. 363.

† See the history of the *Sinhalese* language in my *Introd: to the Sidat-sangarā* p. clxxxvii. et seq.

In view of the particular affinity which the Pâli and the Prākṛit dialects bear to the Sinhalese, and the historical conjectures as to the formation of the latter, it may also be affirmed that the Sinhalese is not a direct off-shoot of the Sanskrit. Yet, all this may be assented to without in the least affecting the proposition, that the *Sinhalese* belongs to the Northern division of languages, and cannot be classed amongst 'the languages of the Dekkan,' which, in accordance with the language of Mr. Caldwell, I shall in future designate the 'Dravidian.'

It may be here convenient to consider the *historical* before entering upon the *philological* questions, that relate to the subject. I believe it is a universally admitted fact, that before the Aryas or Sanskrit speaking people of Hindustan first emerged from obscurity, and settled themselves in upper India, the whole of the Peninsula from Cape Comorin to Himalayā, and also the Lankā of the Rāmāyana, had been peopled in every direction by an entirely distinct race of people in different stages of civilization, whom they designated *Daitya*, *Danavā*, (Yakkhas or) *Rākshas*, and *Mlichhas*\*. These were the Yakkhas or barbarians whom Vijaya found on his arrival in Lankā, and of whom the early Sanskrit and Bhuddhist writers speak with much aversion. This taken in connection with the fact that Demonolatry, or the worship of devils in Ceylon, is identical with 'the system which prevails in the forests and mountain fastnesses throughout the Dravidian territories and also in the extreme South of the Peninsula,'† leads to the inference, that the early settlers of Ceylon were a portion of the aboriginal inhabitants of India before its occupation by the Arya race. But it is also a fact, as I shall show hereafter, that they have neither retained their national character nor their national language.

---

\* Dr. Stevenson's *Kalpa Sūtra*.—p. 133.

† Caldwell in his *Dravidian Grammar* says, 'This system was introduced within the historical period from the Tamil Country into Ceylon, where it is now mixed up with Buddhism.--p. 519.

The only tribes, however, that have not intermingled with the Sinhalese, and whose savage condition in modern times may be identified with the ancient barbarity of the yakkhas, are the *Veddas*; and these, be it remembered, are as distinct from the Sinhalese as are the Tamils of the North. There is also a distinctive class called the Rodiyas, and it is remarkable that their ranks were replenished from time to time with Sinhalese convicts of all castes from the Royal to the plebeian. Mr. Casie Chetty, the author of the Ceylon Gazetteer in giving a number of words in current use amongst the Rodiyas expresses a conjecture 'that they were either a colony of some of the wandering hordes from India, or a fragment of the aborigines of Ceylon itself' partially blended with the Sinhalese.\* This is very probable; and although we have not sufficient materials for comparison, yet the few words which have been collected of this dialect, containing the names for the common wants of mankind are, with six exceptions, different from 'the Sinhalese as it is spoken at the present day, and still more strikingly as it exists as a written language in the literature of the island.†

The mention of Nāgas or Nāgaworshippers, with whom the yakkhas had shared the kingdom of Lankā, does not lead to any certain results. For the Nāga worship had been diffused from a very early age throughout the whole of India‡ as well as in the north-west frontiers of the *Arya-desha*, as for instance, Cashmir.§

The worship of the Nāgas, moreover, was confined to that portion of this island, once called the *Nāga dīpa*, 'the northern and north-western parts of Ceylon, where Tamilians commenced to form

\* C. B., A. S. J. Vol. vi. p. 171.

† From amongst 128 words given by Mr. Casie Chetty, of the Rodiya dialect we can only identify 6 Sinhalese words e. g. *bintalāwa* 'earth,' altho' strictly speaking it is a 'plane;' *kalluwella* for *kaluwara* 'darkness;' *boralowa* for *boralu* 'gravel;' *bilinda* 'boy;' *murutan* for *mulutan* that which is cooked; *pikanuwa* for *penenawa* 'perceive' C. B., A. S. J. 1850—3. p. 177 et seq.

‡ Asiatic Researches xx p. 95.

§ See Rajatarangani.



settlements prior even to the Christian era, and from whence they have gradually thrust out the Sinhalese.\*

These are, however, points of inquiry which may be dispensed with, in view of the fact, that, after the arrival of Vijaya both the aboriginal inhabitants of Lankà and their language had been so merged in the Arya invaders and their dialect, the Sinhalese, that little or nothing physically, historically, or philologically can now be traced to a Dravidian origin;† whilst all such considerations lead to the inevitable result of the Sinhalese language being an off-shoot of the speech of the Aryas, or the *Pāli*, or a *Prākṛit* dialect.

'It is vain' says Mr. Caldwell, and he says it truly,—'to expect from considerations of colour and complexion any real help towards determining the race to which the Dravidian belongs', p. 512. For, to state a fact mentioned by himself, and known to us in Ceylon "the descendants of the Portuguese who settled in India several centuries ago, are now blacker than the Hindūs themselves," p. 513. Regarding, therefore, "colour as a most deceptive evidence of relationship and race," [p. 515.] we may next direct attention to it in connection with a less fallible testimony, viz., "the shape of the head and the more permanent peculiarities of feature;" (ib) and here I need not labour to prove that the Sinhalese present a wide difference from all the races of the Dekkàn. For instance, the features of the Tamils of the Southern Peninsula are peculiar, and though the complexion of the Sinhalese presents different shapes, the 'copper colour' is that which prevails over the rest: and this again it would seem is the colour of the Arya race, so much honored by Manu (cap. iv. § 130) when he declared it an

\* Caldwell's *Drav. Grammar*, p. 4.

† Caldwell says "It is undeniable that emigrations from Ceylon to the southern districts of India have occasionally taken place. The Teers (properly *Tivār islanders*) and the Ilavars, 'Sinhalese,' (from 'Ilam', *Ceylon*, a word which has been from the Sanscrit 'Simhālam' or rather from the Pālī 'Sihālam' by the omission of the initial 's') both of them Travancore castes, are certainly immigrants from Ceylon"—*Caldwell's Com. Gr.* p. 72.

insult to pass over 'even the shadow of a copper coloured man.' The colour as well as the features of the inhabitants of the Dekkan are certainly distinguishable from those of the Sinhalese even by a casual observer. An utter stranger to the various races cannot be three weeks in this Island before he perceives the striking difference between the manners and habits of the Sinhalese on the one hand, and those of the different other races on the other. European Teachers have frequently observed the facility with which the Sinhalese pronounce European tongues, presenting in this respect a quality distinguishable from every race of South-Indian people.

It may, however, be urged by those who advocate a contrary opinion that the use of long hair by the Sinhalese, a practice to which Agathemerus, a Greek Geographer of the third Century bore testimony,\* is worthy of notice in an inquiry into the relations of the Sinhalese with the early Dravidians. It is true enough that the usage referred to is equally characteristic of the Dravidian race.† But I submit that we have no undoubted testimony of the same usage not having existed in the Northern territories from whence Ceylon was peopled. On the contrary, the fact of Sāgara's having imposed 'shaving the hair' as a punishment on the Yavanas implies that it had been previously customary to use the hair long: and it is also not a little remarkable that Gotama Buddha a North-Indian is represented, like Siri Sanghabodhi, one of our kings,‡ to have worn tresses and a top-knot. But even supposing that such was not the case, and that the practice of twisting the hair into a knot at the back of the head is identical with that of the Dravidian race; and that, as stated by Mr. Caldwell, 'it was from Dravidian settlers in Ceylon that the

---

\* 'The natives cherish their hair as women among us and twist it round their heads.'

† "Up to the present day the custom of wearing the hair long, and twisted into a knot at the back of the head is characteristic of all the inferior castes in the southern Provinces of the Tamil Country"—Caldwell's Grammar p. 75.

‡ See Attanagallwansa Cap. i § ii.

Sinhalese *adopted the same usage*' (p. 75); it may still be affirmed that there is nothing in this circumstance which militates against our position.

Historically Professor Lassen himself furnishes us with an item of proof which I shall here notice. He says 'whenever an original language has been retained, as among the Gondas, the Kandas and the Padarias, there is nothing of the civilization of the Aryas, or merely a sprinkling of it; but wherever, on the other hand, Arya civilization has penetrated and prevailed, as among the Kolas of Guzerat and others, the language of the Arya has also come into use.' Applying this test to Ceylon and its language, I perceive the result to be in direct opposition to the opinion of Mr. Lassen to which I first attracted attention. For, to suppose that Ceylon retained its aboriginal language even after the Vijayan conquest is to affirm that the Sinhalese received not even a "sprinkling" of the Arya civilization; which is not the case, the fact being, that far from its being 'a mere sprinkling' Ceylon has enjoyed from the very settlement of Vijaya a greater share of civilization than any other Country in the Dekkan, or in the fastnesses of the Vindhya.

Nor is Sir Emerson Tennent of a different opinion, for he distinctly says "To the great dynasty (of Vijaya) and more especially to its earliest members the inhabitants of Ceylon were indebted for the first rudiments of civilization, for the arts of agricultural life, for an organized Government, and for a system of national worship." (Vol. I p. 360.)

This being established, the converse of the proposition laid down by Professor Lassen holds good, viz—that 'with the civilization of the Arya invaders the aborigines adopted their dialect.'

History also shows that the new colonists retained a distinct and separate character; and that although intermarriages might have taken place between the Yakkhas and the new settlers;\* yet that the

---

\* The only mention however of this in the Mahawansa has reference to Vijaya; and the facts there stated clearly show that he was *not* "married" to Kuveni as supposed by Mr. Caldwell p. 81, but that having been captivated by

former remained, for a time, a distinct tribe; and that they wholly disappeared after 275 A. D., at which period they are for the last time spoken of in History as a servile class engaged in opening Tanks, etc. But whatever inferences may be drawn from the mention of the Yakkhas in the early part of our history; it is quite clear 'from all existing evidence,' 'that the period at which a vernacular dialect was common to the Yakkhas and Vijayan Colonists must have been extremely remote'\* and that the former soon disappeared either by amalgamation with or disintegration from the conquerors. The last supposition is however the more reasonable; since we find until very recent times a distinct tribe of people, in Ceylon, called the *Veddas* or *Beddas*, answering to the uncouth "Yakkhas" or "Monkeys" of ancient writers.

The language of our first monarch Vijaya was probably the Páli or the Prákrit. He came to Ceylon shortly after Gotama, who spoke the Páli or the Māgadhī. He was descended through the female branch of the Royal family of *Kalinga*, and his birth place was *Lala*, a subdivision of Magadha. "And the position," says Mr. James Prinsep (Bengal A. S. Journal vol. ii. p. 280) "assumed by Mr. Lassen that the Páli of Ceylon was immediately derived from the shores of *Kalinga*, independently of its being matter of history, is supported by the evidence of the records now discovered in that country:" and although Professor Lassen regards this as a question involved in obscurity, yet the very name given to the Island by Vijaya, and which we find was shortly afterwards used by the Indian Monarch *Asoka*, in his rock inscriptions, would lead to the inference that the Páli was the language of the con-

---

her charms Vijaya had her for his *mistress*, and that when he had found he could not according to the usages of the east be crowned without a queen consort, whom a Yakkinni or 'non-human being' would ill represent, although the mother of two children, he discarded them all for the daughter of King Pandiya of the nearest civilized state.

\* Sir J. E. Tennent's Ceylon p. 328, with whom I entirely concur in the matter, having long abandoned a contrary opinion which I expressed in my *Sidatsangara*. p. xxiv.

querors. We are not told what was the language of the letters which accompanied the embassy sent by Vijaya to King Panduwa for a Royal Princess; but it is probable that the letter of invitation, to his brother (See Mahawansa p. 53,) *Sumitta*, was in the *Páli* or the *Prákrit*, a language of the North, which, we learn from history, was greatly cultivated throughout the greatest part of Central India, which was at this time subject to *Magadha*. It is also ascertained from our historical Annals that our Kings had frequent intercourse with Arian and Dravidian Princes, and in some places the Historian describes the correspondence as having been carried on in 'the *Páli* language.'

There is another circumstance which may be here noticed. The birthplace of the first settlers of Ceylon was *Lala*. It is identical with *Láta* and *Láda*, and Dandi, the author of *Kávyadara*, says that even in comparatively a modern age, that of the Dramas, the language of *Láta* as well as of *Banga* (which latter is only a different pronunciation of Vanga, and merely another name for *Gawda*) is usually the *Prákrit*. His authority goes further, for he places the language of *Lala* in the same class as that of *Gauda*, *Surasena*, etc: and his Commentator explains the '*et cetera*,' to mean the *Magadhi* (or *Páli*) and *Panchala* (the *Zend*). Hence all circumstances considered it is very clear that the *Páli* was the language of the band from *Lala* who colonized Ceylon, or rather a modification of it which bore the nearest relation to such languages as the *Suraseni*, and the *Zend*—at all events a so-called *Prákrita* dialect; therefore a language of the Arian and not of the South Indian class.

The last inference receives confirmatory proof from another historical fact, viz., that on the arrival of Mahindu in the Island he was not only able to converse readily with the people, but without loss of time to preach to them in 'the *Sinhalese*' language, or 'the language of the land.' This shows the intimate relationship which originally existed between the Sinhala and the dialect of Pataliputta; and although in course of several centuries as stated in the *Sa-basalankara*, the Sinhalese has undergone a vast change, yet it

may be readily believed that this change consisted in the dialect of the conquerors, (which was probably the Prākṛit) being melted with the preexisting language—i. e. by a process of shortening the words of that language, and modifying it so as to suit it to the tongue of men, whose organs of speech were incapable of enunciating several of its elements, such as the aspirates and combined consonants. I shall hereafter adduce 'unequivocal proof' of the fact, that the *Sinhala* as it is known even at the present day, exhibits the nearest affinity to the Pāli and the most distant connection with the Dravidian—a fact which is farther borne out by the facility with which Buddhagosa of *Pataliputta* translated the Sinhalese *Aṭṭhakatha* into the Pāli. It is also a fact to which I may briefly allude here, that the only Sinhalese Grammar now extant in this Island, follows Sanskrit and Pāli, and not Dravidian writers.

It is certainly true, as stated in the *Sidatsangarā*,\* that there are three elements in the Sinhalese, one in connection with the Sanskrit—another with the Pali—and the third with the local; but it must be remembered that the pure Sinhalese so formed upon the establishment of the Vijayan dynasty appears to have been drawn† chiefly from the Sanskrit in the 15th Century after Christ, and from the Malabar and Telingu after the domination of the Dekkan princes, of whom the last deposed Sinhalese King, Sri Wekrama Rāja Sinha, spoke the Telingu well, and the Sinhalese but indifferently.

It was perhaps this latter phenomenon in the Sinhalese that led the Rev. Dr. Stevenson to consider the *Sinhalese* also as a branch of the Southern family.‡ His own observations, however,

\* See Introduction p. xiviii.

† See the comparative specimen of the ancient and modern Sinhalese in the *Sidatsangara* pp. xxxvi, wherein, if one thing is clearer than another, it is that nearly every word in the first is directly traceable to the Pali, and in the second to the Sanscrit.

‡ See Bombay Asiatic Journal for 1842 p. 195; he also places the *Maldivian* under the head of the southern family; but I may here remark that it is clearly traceable to the Sinhalese.

militate against this opinion, for he says: 'The *Hindi* which contains the most (i. e. Brahminical words) is estimated by Mr. Colebrook to have *nine-tenths* of its vocables of Sanskrit origin, and the *Marathi* which contains the fewest has at least *four-fifths* of its words derived from the same source. In the Southern family again Sanskrit words are of rare occurrence, and enter less into the common language of the people, except in the *Sinhalese* which from the influence of the Páli chiefly derived from the Sanskrit and the language of the Buddhist literature has *nearly as many words originally derived from the Sanskrit as the Hindi itself*.

Before however I proceed to adduce the promised proof to establish the non-Dravidian origin of the Sinhalese, and which I purpose to lay before this Society at a future opportunity upon several distinct heads, I may conclude my introductory remarks by quoting the expressed opinion of two of the most eminent linguists of the day, viz., Caldwell and Max Muller, names which, as you know, must be deemed to impart confidence to those who have the honor to labour in the beaten path in which they have travelled. The author of the invaluable Dravidian Grammar says, 'There is no relation, however, between the Sinhalese language—the language of the Sinhalese properly so-called, who were Buddhists and Colonists from *Magadha* or *Behar*—and the language of the Tamilians, nor is there any reason for supposing that the natural course of migration (viz., from the mainland to the Island) was ever inverted to such a degree as to justify the supposition that the whole mass of the Dravidians entered India from Ceylon.' p. 73.

And although there is a slight difference of opinion between Professor Max Muller and myself as to the relationship which exists between the Sanskrit and the Singhalese; yet it will be observed that that difference is one which does not affect the main question in hand. He says:—'The Sanskrit now lives only in its offspring, the numerous spoken dialects of India—Hindustani, Maharatti, Bengáli, Guzerátè, *Sinhalese* etc, all preserving in the system of their grammar, the living traces of their common parent.'—*Survey of Languages*, p. 31.

*A few remarks on the poisonous properties of the Calotropis Gigantea, the Mudar of Bengal, the Yercum of the Tamils, and the Warra of the Sinhalese.—By W. C. ONDAATJE, Esq., Asst. Col. Surgeon.*

In the course of my public duties, as Medical Officer, in charge of the Civil Medical Stores, I was called upon to discover, if possible the cause of the death of one John Melder. He died at Chilaw, and the stomach and intestines with their contents were sent to me on 31st March last for examination, 12 days after death. He died shortly after some drugs had been administered to him by a native, who was considered to be a most experienced medical practitioner. It appears that the deceased having required an emetic, the native Doctor gave him a small quantity of powdered Kukuroomang seed, (*Randia dumetorum*), a well known native emetic, mixed in about 2 dessert spoonfuls of the milk of the plant called Warra (*Calotropis Gigantea*) with a quantity of cow's milk.

The immediate effects of the dose were incessant vomiting, and excruciating pain in the bowels: the extremities became benumbed and lifeless; and in about 2 hours after the medicine had been given, death supervened. The mudar has not to my knowledge been considered as a poison by Toxicologists either Indian or European. I made some experiments with a view of ascertaining the physiological properties of the fresh milk of the mudar. An ounce of it being given to a pup, in 5 minutes it began to froth at the mouth, and violent vomiting ensued until the stomach was completely emptied of its contents. The animal cried and groaned evidently from pain in the bowels. It lay down on the ground and gradually sank and expired within 24 minutes.

Ten minutes after I examined the animal. The mouth and tongue were of a violet colour. The stomach was quite empty, and the



mucous membrane corrugated, the intestines were contracted presenting a cord-like appearance, and spots of inflammation were visible.

The left ventricle of the heart and the larger vessels contained fluid blood.

A second experiment was made on a little dog. The quantity used was 60 drops diluted with water.

The symptoms already referred to followed each other in regular succession being attended with bloody stools. Death ensued in this case in 18 minutes.

These experiments afford sufficient and satisfactory data to lead us to the conclusion, that the milk of the mudar may be placed on the list of the most deadly vegetable poisons in Ceylon and India.

In the rapidity with which it destroys life, it is equal to the poison of the Upas, the celebrated Java poison, which it is well known is a milky juice drawn from the *Antiaris Toxicaria* producing the same symptoms on the animal economy that the juice of the warra does.

From the effects which the milk of the *Calotropis gigantea* has thus been ascertained to produce, it appears to me to belong to the class of Narcotic-Irritant poisons, a class of poisons that act on the Cerebro-spinal system of the nerves paralysing the muscles and finally the heart.

During the trial of the case it was clearly proved that the patient suffered from exactly the same painful and fatal effects that were noticed in my two experiments; and the contracted cord-like appearance of the man's Intestines sent to me for examination at once convinced me that death was caused by the effects of the Mudar Milk, which, though as I believed hitherto unknown as a poison, is positively such, and that of an irritant character.

As this cannot but be of great interest to the Indian Toxicologist, I have in these few remarks brought it to the notice of this Society, as this is the only literary and scientific body in Ceylon through which the fact can be communicated.

The Native doctor who administered the drug was tried for manslaughter in September last at Chilaw, and sentenced to 2 years imprisonment within the gaol. The leniency of the sentence is to be attributed to the circumstance, that the malpraxis in the opinion of the Jury, was the result of carelessness and ignorance.

---

*On the Crocodiles of Ceylon—By the Revd. PRINCIPAL ROAKE.*

---

The favourite haunts of Crocodiles being but seldom visited, in consequence both of the insalubrity of the localities in which they are generally to be found, and of the dangerous character of their inhabitants, the habits of these animals are very imperfectly known. The following account of two nests, which were recently found within a few miles of Colombo, may therefore be interesting to Naturalists.

The first of these nests was discovered by Mr. Symonds of the Survey Department, who found it to contain about 150 eggs, which he removed, not without considerable risk, having been repeatedly charged by the old Crocodile who was guarding them.

My curiosity having been excited by the description which I received of the nest from Mr. Symonds, I went to examine it myself. I found it amongst the bushes on the swampy bank of the Bolgodde lake, at a distance of a few feet from the water.

The nest itself consisted of wet vegetable matter mixed with mud, and was raised to the height of between three and four feet, presenting in shape very much the appearance of a small conical haystack, but in colour and consistency that of a heap of dung. Round the base of the cone, was a circular trench more than three feet broad, and about two feet deep, in which the old Crocodile was wont to wallow while watching her nest. The circle enclosed by this trench, the whole of which was covered by the base of the nest, was between six and seven feet in diameter.

I am not aware that these conical nests have been previously noticed. The Rev. J. G. Wood, who makes no mention of the nests of the Crocodile, says in speaking of the Alligator in his *Illustrated Natural History*, that the parent deposits her eggs in the sand of the river side, scratching a hole with her paws, and placing them

in a regular layer therein. "She then scrapes some sand, dry leaves, grass, and mud over them, smoothes it, and deposits a second layer *upon them*. These eggs are then covered in a similar manner and another layer deposited, until the mother has laid from 50 to 60 eggs. Although they are hatched by the heat of the sun and the decaying vegetable matter, the mother does not desert her young, but leads them to the water and takes care of them, until their limbs are sufficiently strong, and their scales sufficiently firm to permit them to roam the water without assistance."

It will be seen that the nest of the Crocodile of Ceylon differs considerably from that of the Alligator as described by Mr. Wood. In the former the eggs are placed at a height of at least two feet above the surface of the water; and, although the nests in Ceylon are principally composed of aquatic weeds in a wet state, which might be expected to give out considerable heat in fermenting, yet I do not believe that any artificial heat is required to hatch the eggs, because several eggs, which were procured from the Bolgodde nests, were hatched in my house, being merely deposited in earth which was kept damp and exposed to the rays of the sun.

While examining the nest that had been discovered by Mr. Symonds, we were told by some natives who accompanied us, that there was another nest, within a mile or two of the spot, which had not yet been disturbed.

On visiting this second nest, we found it in all respects very like the first, except that it was not so large, and that, besides the trench which surrounded it, there were one or two holes in the swamp in which the natives said that the old Crocodile was accustomed to lie.

Warned by the narrow escape which Mr. Symonds had when examining the first nest, we approached very cautiously, expecting an attack every moment, and when we were all assembled on the edge of the trench surrounding the nest, we hesitated to cross it, because it was when he was in the act of stepping across the trench, that Mr. Symonds was first attacked by the other Crocodile, which raised its formidable jaws directly beneath him, and would no doubt have effectually put a stop to his proceedings, had he not

promptly discharged the contents of his fowling piece down her throat.\* On finding however that no Crocodile appeared, our confidence returned; and at length one of our number ventured to approach near enough to remove the top of the nest, and to take away the eggs, of which he procured twenty-five.

On my expressing astonishment at the pacific conduct of the parent Crocodile, and suggesting that it was probably absent in pursuit of food, the natives who were with us expressed their conviction, that it was at that moment in the trench; but that it was of a different *caste* from the first. Further enquiries have satisfied me that this belief in the existence of two different species, or, as the natives call them, *castes*, of Crocodiles is universal in the country; and Dr. J. Anderson, of the Indian Museum, Calcutta, informs me that a similar belief prevails in Bengal respecting the Mugger, which closely resembles the Crocodile of Ceylon, if it be not identical with it. One *caste* is said to confine itself to a fish diet, while the other attacks human beings.

The former, called by the Sinhalese Elle Kimbola, or Grey Crocodile, grows to a larger size than the more savage species, and is said to be that which is found about Kornegalle. As I have two thriving specimens, hatched from the eggs of the Crocodile which attacked Mr. Symonds, and am promised one of the progeny of that which submitted so quietly to the plundering of its nest in my presence, I hope that I shall be able to ascertain, by the aid of some eminent English Naturalist, whether they belong to the same or to two different species. At present they present no difference in appearance that an unscientific eye can detect.

I may mention that there is some difficulty in bringing up young Crocodiles by hand, as they obstinately refuse every kind of food that I have ever presented to them. One, which was brought to me some years ago, died of inanition, although, for a week or ten days that it was in my possession, I constantly tempted it with

---

\* This shot was not, however, fatal; for Mr. Symonds was subsequently charged twice by, as he believes, the same crocodile.

both flesh and fish. Those which I now have I feed by forcing bits of raw meat down their throats with a stick, two or three times a week. Under this treatment, they seem to thrive, having about doubled in size since they left the egg; but the operation is not a pleasant one, and requires some dexterity, as their teeth are exceedingly sharp, and they lose no opportunity of turning upon the hand that feeds them.

---

### *Native Medicinal Oils.*

The processes, by which all Medicinal oils are prepared, would seem to be almost the same, except in the case of a few.

The general process followed in these preparations, is this:—

The drugs prescribed for the first decoction, being cut up and pounded together, are put into a vessel (earthen or copper) with well-water four times the weight of the drugs; the whole is then gauged by means of a piece of stick, on which accordingly a mark is put to denote the quantity, and three times as much water is again added. This is boiled down to a quarter of the whole or until it is reduced to the mark. The boiling must go on very slowly, continuing for seven days. Sometimes the juices of certain plants are substituted for this decoction.

This first decoction being then strained is put into a vessel, generally copper, with oil (*Sessamum* or other as the case may be) equal to a quarter of it in weight, and is next boiled with a medicinal composition, called "*Kalke*," compounded of a number of medicinal drugs well ground together, which *kalke* itself must, in weight, be equal to a quarter of the oil. The boiling of this, which may be called the second decoction, is continued for nearly five days more, except where juices are used instead of the first decoction, in which case, the boiling should not exceed three days. When the *Kalke* assumes the consistency of Bees' wax, the vessel is taken off the fire, and the liquid being then well strained, becomes the *Medicinal Oil*.

---

#### OILS. No. 1.—*Sidharte Tiele*.

##### FIRST DECOCTION.

Bely—*Ægle marmelos*, Corr.

Middy—*Premna serratifolia*, Linn.

Totilla—*Calosanthus indica*, Blume.

Palol—*Spathodea adenophylla*, D C.

Etdemata—*Gmelina Rheedei*, Hook.

Aswenna—*Alysicarpus vaginalis*, D C.

Polpala—*Ærva lanata*, Juss.

Endero—*Ricinis communis*, Linn.

Batu—*Solanum Indicum*, Linn.

Bewille—*Sida species*.

Take the roots of these in equal quantities, add them together, and the roots of *Satavaria*, *Asparagus racemosus*.

Pound them well and put all in a vessel with four times their weight of water. Put a mark, and then add three times the same quantity of water. Boil down the whole to a quarter.

#### SECOND DECOCTION.

Strain and put this first decoction into a clean vessel, with *Sessamum* oil and cow's milk, each equal to a quarter of it in weight. Then add *Kalke* composed of the following ingredients, by grinding them together with cold water.

Satepuspe—*Anethum sowa* seed.

Wadekaha—*Acorus calamus*.

Inguru—Ginger.

Savindelunu—Rock salt.

Maha Arathe—*Alpinia Galanga* Linn.

Sulu Arathe—?

Ensaal—Cardamoms.

Dewedaare—*Pinus Deodar*.

Sandoon—Sandal.

Kottan—*Aucklandia Costus*, Falk.

Galmade—Talc.

Amukkera—*Withania somnifera*, Dun.

Meretemis—Pepper.

Jatamanse—*Nardostachys Jatamansi*, D C.

Welmadete—*Rubia cordifolia*.

These should be taken in equal quantities, and when added together, the whole must be equal, in weight, to a quarter of the oil



taken. All this must be boiled until the water is completely exhausted, and the Kalke assumes the consistency of Bee's wax. Then strain the oil.

#### VIRTUES.

In all cases of pain in the sides, &c., Rheumatic or otherwise, the oil may be rubbed over the parts affected; if the ailment be severe, a table spoonful to be internally applied,—immediate relief is certain. Females far advanced in pregnancy may safely drink this oil in cases of pain in the chest and abdomen. This is also good for diseases in the ear and head, seven or eight drops may be applied to the ear and a little rubbed on the head. This oil is of a cold temperament, and is specially adapted for persons who suffer from excessive heat in the system.

It may be safely used in cases of illness among children.

---

#### No. 2.—*Yaamedewe Kase Tiele.*

Make the First decoction of the following drugs by boiling them in the manner prescribed.

Roots of Wara—*Calatropis gigantea*, R. Br.

Navehandy—*Euphorbia Tirucalli*, Linn.

Karande—*Pongamia glabra*, Vent.

Totile—*Calosanthos Indica*, Blume.

Waila—*Gynandropsis pentaphylla*, D. C.

Patuk—*Euphorbia nereifolia*, Linn.

Yakevanasse—*Anisomeles ovata*, R. Br.

Yakberiyē—*Crotalaria laburnifolia*, Linn.

Welrukattene—*Cryptolepis Buchanani*, Roem. et Sch.

Kurundo—Cinnamon.

Louuvarene—*Cratœva Roxburghii*, R. Br.

Saksande—*Aristolochia Indica*, Linn.

Batu—*Solanum Indicum*, Linn.

Ratnetul—*Plumbago rosea*, Linn.

Tombe—*Leucas zeylanica*, R. Br.

Kariville—*Momordica Charantia*, Linn.

Madarutala—*Ocimum canum*, Linn.

Bely—*Ægle marmelos*, Corr.  
 Cohombe—*Azaderachta Indica*, Ad. de Juss.  
 Pamburu—*Limonia Missionis*, Wall.  
 Hingerupatta—*Acacia concinna*, D. C.  
 Eremudu—*Erythrina Indica*, Lam.  
 Murunga—*Moringa pterygosperma*, Gært.  
 Niyede—*Sansevieria zeylanica*, Willd.  
 Kukurumaan—*Randia uliginosa*, D. C.  
 Siviye—*Chavica Chuvya*, Moq.  
 Nike—*Vitex Negundo*, Linn.  
 Inguru—Ginger.

## SECOND DECOCTION.

Take the following oils in equal quantities, so that the whole may be equal to a quarter of the first decoction.

Sessamum oil—

Castor oil—

Mee-oil—Expressed from the seed of *Bassia longifolia*.

Cohombe-oil—*Margosa*.

Next add kalke made of the following ingredients taken in equal proportions.

Seeds of Daluk—*Euphorbia antiquorum*, Linn.

Moonemal—*Mimusops elengi*, Linn.

Medelle—*Barringtonia racemosa*, Rox.

Rukpenere—*Sapindus emarginatus*, Vahl.

Puhul—*Benincasa cerifera*, Lavi.

Dette—*Baliospermum polyandrum*, Wight.

Kekiry—*Cucumis*, sp.

Nelly—*Phyllanthus Emblica*, Linn.

Mee—*Bassia longifolia*.

Siviye—*Chavica Chuvya*, Moq.

Trastevalu—*Ipomœa turpethum*, R. Br.

Kaluduru—Black cummin seed, *Nigella sativa*, Linn.

Sududuru—White cummin seed.

Asemodegan—Parsley.

Inguru—Ginger.

- Miris—Pepper.  
 Tippily—Long pepper.  
 Arelu—Terminalia Chebula, Retz.  
 Bulu—Terminalia Belerica, Roxb. fruit.  
 Nelly—Phyllanthus Emblica, Linn.  
 Noce—Nutmeg.  
 Wasawasi—Mace.  
 Krabo—Clove.  
 Suduloonu—Garlic.  
 Wadekaha—Acorus calamus.  
 Peronkayan—Assa foetida.  
 Seenakkaaran.  
 Palmaanikkan—Blue vitriol.  
 Savindelunu—Rock salt.  
 Yavekarelunu—Nitrate.  
 Soveselunu—Natron.  
 Balal lonu.  
 Harankaha—Curcuma Zerumbet, Rox.  
 Satepuspe—Anethum sowa, Rox.  
 Welmee—Liquorice.  
 Kottan.—Aucklandia Costus, Falk.  
 Maasakka—Oak Galls.  
 Boil these for five days, and strain the oil.

## VIRTUES.

This oil cures all boils in the throat. It renders the aid of the Surgeon unnecessary, even in cases, in which it had at first appeared to be indispensable. Even cases which had resisted the utmost skill of the Surgeon, have often yielded to the application of this oil, when such application had been made after mere opening of the boil. In cases of boils inside the throat, it should be drunk by the patient, about a Tea-spoonful at a time, once or twice a day. In other cases it may be rubbed over the boil.

In cases of scrofulous tumours round the neck, the oil should be rubbed over them and they should be fomented with burnt salt.

*No. 3.—Wiridukomaare Tiele.*

Make the First decoction of the following drugs.

Roots of Garide—

Lonuvarene—*Cratœva Roxburghii*, Wall.

Waraa—*Calatropis Gigantea*, R. Br.

Totile—*Calosanthes Indica*, Bl.

Seenuk—*Euphorbia Tortillis*, Rottl.

Enderu—*Ricinis Communis*,

Karendé—*Pongamia Glabra*.

Beville—*Sida* Sp.

Ratnetul—*Plumbago Rosea*, Linn.

Nike—*Vitex Negundo*.

Daluk—*Euphorbia Antiquorum*, Linn.

### SECOND DECOCTION.

Take equal quantities of the following oils, so that the whole may be equal to 1-4th of the First decoction.

Sessamum oil—

Castor oil.

Mee-oil—*Bassia Longifolia*.

Cow-ghee.

Cohambe oil—*Margosa*.

Next make "*Kalke*" of the following ingredients.

Seeds of Pusvel—*Entada scandens*, Benth.

Cumburu—*Guilandina Bonduc*, Linn

Karendé—*Pongamia glabra*.

Arelu—*Terminalia Chebula*, Linn.

Bulu—*Terminalia Bilirica*, Linn.

Nelly—*Phyllanthus emblica*.

Sududuru—White cummin seed.

Caluduru—Black cummin seed.

Asemodegan—Parsley.

Sadikka—Nutmeg.

Kraboe—Clove.

Wasawasi—Mace.

Kottemally—Coriander.

Uluva—Trigonella Fœnum-græcum, Linn.

Peronkayan—Assa foetida-

Suduloonu—Garlic.

Inguru—Ginger.

Miris—Pepper.

Tippily—Long pepper.

Boil these and strain the oil.

#### VIRTUES.

A remedy for all "*Sanny*" diseases, fits arising from excessive cold, especially in child birth, and oppression in the chest. To be applied internally and poured in the ears and nostrils.

For all pains and "*Andevayo*", Hydrocele, it is to be rubbed on the parts—and for costiveness of the bowels it is to be rubbed on the abdomen and fomentations must be applied.

This has also the effect of instantly warming the blood.

#### No. 4.—*Wajjrekaanty Tiele.*

Make the First decoction of Bewille roots.

#### SECOND DECOCTION.

Take each of the following liquids equal to the weight of the First decoction.

Juice of Kidaran-alle—Roots of *Amorphophallus campanulatus*, Bl.

Tender cocoanut water.

Cow's milk.

Then take a quantity of Sessamum oil equal to one-sixteenth of the aggregate weight of the First decoction and the other three liquids.

Next add "*Kalke*" equal in weight to one-fourth of the *Sessamum* oil, by grinding together the following ingredients in equal quantities.

Dewedaare—*Pinus Deodar*.

Kalanduru—*Cyperus rotundus*.

Satepuspe—*Anethum sowa*.

Inguru—Ginger.

Kaha—*Curcuma longa*.

Wenivel—*Coscinium fenestratum*, Colebr.

Kottan—*Auckandia Costus*, Falk.

Kattekumtchal—*Frankincense*.

Ensaal—Cardamoms.

Kurundopotu—Cinnamon bark.

Namal-reno—Pollen of Iron-wood flower.

Sandun—Sandal wood.

Hore-aretu—Core of the *Dipterocarpus zeylanicus*, Thw.

Nelun-alle—*Nelumbium speciosum*-root.

Boil all these as usual, and strain the oil.

#### VIRTUES.

Good for all sorts of diseases, to be drunk, or rubbed over the parts affected, or to be applied to the nose. This is particularly successful in cases of boils in the throat, and mouth, and Gum-boils, as well as all asthmatic diseases even in children.

#### No. 5.—*Vaate murtu Tiele*.

Substitute the Juice of the following plants for the First decoction.

Mowekeeriye—*Sarcostemma viminalis*.

Waraa—*Calatropis gigantea*

Daluk—*Euphorbia antiquorum*.

Kansa—Hemp.

Nike—*Vitex*, Negundo.

Timbiri—*Diospyros glutinifera*.

Extract the juice of the leaves of the first five plants, and of the bark of the last plant, and take them in equal quantities.

Next take the following oils in equal quantities, so as to make the whole equal to a quarter of the composition of the above juices.

Mee-oil—Extracted from the seeds of *Bassia longifolia*.

Sesamum-oil.

Castor-oil.

Cow-ghee.

Cocanut-oil.

Then make "*Kalke*" of the following ingredients.

Kaha—*Curcuma Longa*.

Wenivel—*Coscinium fenestratum*.

Tippily—Long Pepper.

Peronkayan—*Assa foetida*.

Moonemal-ete—Seeds of *Mimusops elengi*.

Sodulunu—Garlic.

These should be taken in equal quantities, so that the whole when added together, may be equal to a quarter of the weight or the oils above mentioned. Boil every thing together during three days, until the "*Kalke*" assumes the consistency of Bees' wax, and strain the oil.

#### VIRTUES.

Good for all diseases arising from the morbid or excited state of the windy humour. This oil is of a warm temperament and adapted to persons frequently subject to cold sensations. In all cases of pains it is to be rubbed over the parts affected.

---

#### No. 6.—*Koleslesma Tiele*.

Extract the juice of—

Batu-fruit—A species of the *night shade*.

Kukurumaan fruit—*Randia uliginosa*, D. C.

Demette fruit—*Gmelina Asiatica*.

Pasvel—*Entada scandens*.

Hinguruvel—*Gueilandina Bonduc*.

Niyede—*Sansevieria zeylanica*.

Pupule leaves—*Vernonia zeylanica*, Less.

Embuldoddan—*Citrus aurantium*.

Iremusu roots—*Hemidesmus indicus*.

Sooduloonu—Garlic.

Inguru—Ginger.

Welaa roots—*Gynandropsis pentaphylla*.

Eremudu leaves—*Erythrina indica*.

Kuppeveniye leaves—*Acalypha Indica*.

Murunga bark—*Moringa pterygosperma*.

Take these juices in equal quantities instead of the First decoction, add cocoanut milk equal to a quarter of the whole of the juices, *Sessamum* oil equal to half the cocoanut milk, and the same quantity of Castor oil.

Next make "*Kalke*" of equal quantities of the following ingredients, so that it may equal a quarter of the *Sessamum* and Castor oils.

Dewedare—*Pinus Deodar*.

Welmee—Liquorice.

Savindelunu—Rock salt.

Wasavaasi—Mace.

Seenakkaaran—

Tippily—Long pepper.

Yavekarelunu—Nitre.

Trastevaalu—*Ipomœa turpethum*.

Asemodagan—Parsley.

Akkrepatta—Pellitony of Spain.

Galis—*Gardenia latifolia*.

Kaluduru—Black cummin seed.

Sududuru—White cummin seed.

Karaboe—Clove.

Noce—Nutmeg.

Palmaanikkan—Blue vitriol.

Arelu—*Terminalia Chebula*.

Bulu—*Terminalia Belerica*.

Nelly—*Phyllanthus Emblica*.

Boil all these as usual, and strain the oil at the end of three days.

#### VIRTUES.

Relieves diseases characterized by an excess of Phlegm, such as oppression in the chest, boils inside the throat, Gum-boils, and all kinds of "*Sanny*" convulsion arising from a morbid state of the three humours.

To be taken internally and rubbed over the body.



*No. 7.—Vissassineely Tiele.*

Take the Juices of the leaves of the following plants in equal proportion.

- Aweriye—Indigo plant.
- Attene—Stramonium.
- Naa—Iron wood tree
- Kaha—Turmeric.
- Erremudu—*Erythrina Indica*.
- Aswenne—*Alysicarpus vaginalis*.
- Nike—*Vitex Negundo*.
- Daluk—*Euphorbia antiquorum*.
- Magulkarende—*Pongamia glabra*.
- Katukarendo—*Barleria prionitis*.
- Siviye—*Chavica Chuvya*.
- Kariville—*Momordica charantia*.
- Wang Eppelle—*Justicia adbadota*.
- Puak—Areca
- Tippily—Long pepper.
- Telekeeriye—*Excæcaria agallocha*.
- Wailaa—*Gyandropsis pentaphylla*.
- Patuk—*Euphorbia neriifolia*.
- Cohombe—*Margosa*.
- Getetumbe—*Leucas zeylanica*
- Keekerendeye—*Eclipta erecta*, Linn.
- Maaraa—*Adenanthera pavonina* Linn.
- Kalukammeriya—*Solanum*.
- Katurumurunga—*Agati grandiflora*.
- Totile—*Calosanthus Indica*.
- Godemanel—*Crinum ornatum*, Herb.
- Wasetel—*Ipomœa sepiara*, Konig.
- Karal Sebo—*Achyranthes aspera*, Linn.
- Niyede—*Sansevieria zeylanica*.
- Polpala—*Ærva lanata*, Juss.
- Bely—*Ægle marmelos*,

Poataa—

Yakberiyē—*Crotalaria laburnifolia*.

Pawatta—*Pavetta Indica*.

Andutala—A species of *Ocimum*.

Wadekaha—*Acorus calamus*.

And the juices of Polbadda—Cabbage of the cocoanut tree.

Soduloonu—Garlic.

Mix a quantity of human urine equal to one-tenth of all these juices put together. Add also *Sessamum* oil equal to one-tenth of the aggregate weight of the whole. Next make "*Kalke*" of the following drugs.

Kurundupotu—Cinnamon bark.

Ensaal—Cardamoms.

Inguru—Ginger.

Miris—Pepper.

Tippily—Long pepper.

Kollankole—*Pogostemon Heyneanum*.

Noce—Nutmeg.

Wasawaasy—Mace.

Kraaboe—Clove.

Peronkayan—*Asa foetida*.

Gajetippily—A species of long pepper.

Kelende-ete—*Holarrhena mitis*, R. Br.

Waddekaha—*Acorus calamus*.

Saarene—*Trianthema decandra*, root.

Katerolu—*Clitorea ternatea*, Linn.

Olinde-ete—Seed of *Abrus precatorius*.

Patuk root—A species of *Euphorbia*.

Amukkera—*Withania somnifera*, Dun.

Madurutala—*Ocimum canum*, Linn.

These must be taken in equal quantities, and the whole when prepared, should be equal in weight, to one-fourth of the oil taken.

Boil three days.

#### VIRTUES.

For all serpent-bites to be taken internally, a table-spoonful, and

rubbed on the wound. If the patient lose his senses, a few drops may be applied to the nostrils and eyes.

This will be found equally efficacious in cases of poison.

---

*No. 8.—Heneraaje Tiele.*

FIRST DECOCTION.

Wenivelgete—*Coscinium fenestratum*.

Pananpety.

Roots of Etdemete—*Gmelina Rheedei*.

Ankende—*Acronychia pedunculata*, Walp.

Magulkarende—*Pongamia glabra*.

Anoedaa—*Abutilon* sp.

Welaa—*Gynandropsis pentaphylla*.

Kurundu—Cinnamon.

Nike—*Vitex Negundo*.

Wara—*Calatropis gigantea*.

Iremusu—*Hemidesmus indicus*.

Dehi—Lime.

Embuldodan—*Citrus aurantium*.

SECOND DECOCTION.

To this First decoction add juices of:—

Batu fruit—A species of the *night shade*.

Demete do.—A species of *Gmelina*.

Kukurumaan do.—*Randia uliginosa*.

Dehi do.—Lime.

Dodang do.—*Citrus aurantium*.

Kaameranka—*Averrhoa Carambola*.

Goreke do.—*Garcinia Cambogia*.

Inguru—Ginger.

Pusul—Ash pumpkin.

Annasy—Pine apple.

Heeresse—*Cissus edulis*, Dalz.

These juices must be taken in equal quantities, and the whole must equal the First decoction in weight.

Next add Sessamum oil.

Mee oil—*Bassia longifolia*.

Castor oil.

Cow ghee.

Kohombe oil—*Margosa*.

Cocoanut oil.

These oils must also be taken in equal quantities, so as to make the whole equal to one-eighth of the First decoction and the juices put together.

Then make "*Kalke*" of the following ingredients, taken in equal proportions, so that the whole *Kalke* may be equal to one-fourth of the oils.

Areloo—*Terminalia Chebula*.

Bulu—*Terminalia Belerica*.

Nelly—*Phyllanthus Emblica*.

Inguru—Ginger.

Suduloonu—Garlic.

Abe—Mustard.

Miris—Pepper.

Sewese-lunu—Natron.

Sawinde-lunu—Rocksalt.

Balal-lunu.

Yavekare-lunu.

Lewa-lunu—Common salt.

Savukkaarang—

Degal.

Oluva—*Trigonella Fœnum Græcum*.

Manoseele—Red arsenic.

Hiriyal.

Aankarang.

Seenakkaarang.

Navesaarang—Muriate of ammonia.

Penerepotu—Bark of *Sapindus emarginatus*.

Boil as usual, and strain the oil.

## VIRTUES.

Relieves all sorts of Sanny-convulsion arising from a morbid state of the three humours. To be taken internally and applied to the nose and eyes.

---

No. 9.—*Kayteke Tiele.*

Take the juice of Wetekeyya roots, *Pandanus odoratissimus* and cow milk in equal quantities. Then take Sessamum oil equal to one-eighth of the weight of both.

Next add "*Kalke*" made of the following ingredients, which, when ground, must equal one-fourth of the oil.

Sandun—Sandal.

Welmee—Liquorice.

Kottan—*Aucklandia Costus*.

Kurundu—Cinnamon.

Ensaal—Cardamom.

Kollankole—*Pogostemon Heyneanum*.

Hingurupiyely—*Kæmpferia Galanga*.

Kalanduru—*Cyperus rotundus*.

Koketiye—*Aponogeton crispus*.

Orulesattang—Civet musk.

Dewedaare—*Pinus Deodar*.

Sevenne-roots—*Andropogon muricatum*.

Iriveriye do.—*Plectranthus zeylanicus*.

Sirivedy-beville do.—*Sida species*.

Kapukinisse seeds—*Abelmoschus moschatus*.

Jataamaanse—Indian spikenard.

Boil these for three days and strain the oil.

## VIRTUES.

Relieves all diseases arising from the vitiated or heated states of the blood, such as rheumatic pains, and to be drunk, or rubbed on the parts affected.

---

No. 10.—*Chandrekaanty Tiele.*

The juice of Wetekeyya roots and cow milk in equal proportions

*Sessamum* and Castor oils equal to one-eighth of the juice and milk.

Kalke made of the following drugs equal to one-fourth of the oil as usual.

Dewedaare—*Pinus Deodar*.

Welmee—*Liquorice*.

Iriveriye roots—*Plectranthus zeylanicus*.

Samedera roots—*Samadera Indica*.

Lotsumbulu bark—*Symplocos racemosa*.

Hingurupiyely—*Kæmpferia Galanga*.

Pambemul.

Kuppeveniye—*Acalypha Indica*.

Keekirindiye—*Eclipta erecta*.

Ingin seeds—*Strychnos potatorum*.

Orulesattang—*Civet musk*.

Kayippoo—*Catechu*.

Olinde roots—*Abrus precatorius*.

Kalanduru—*Cyperus rotundus*.

Bintamburu roots—*Ipomæa rugosa*.

Arelu—*Terminalia Chebula*.

Bulu—*Terminalia Belerica*.

Nelly—*Phyllanthus Emblica*.

Sandon—*Sandal*.

Boil these for three days.

#### VIRTUES.

Relieves Headache, heat in the brain and eyes, causing a constant flow of tears. Good for all diseases of the head arising from heat. This is a very mild oil, and good for daily use by rubbing on the head.

---

#### No. 11.— *Dewemurtukumaare Tiele*.

Take the juices of

Mee-roots—*Bassia longifolia*.

Kurundu do.—*Cinnamon*.

Waraa do.—*Calatropis Gigantea*.

Magulkarende do.—*Pongamia glabra*.

These must be taken in equal proportions, as also the following juices, so as to make the latter equal to the former.

The juice of Kinihiriye leaves—*Cochlospermum Gossypium*.

Attene leaves—*Stramonium*.

Keekirindiye leaves—*Eclipta erecta*.

Mugunevenne do.—*Alternanthera sessilis*.

Madurutala do.—A species of *basil*.

Leeme do.—*Dolichos catjang*.

Kapperevalliya do.—*Coleus aromaticus*.

Iriveriye do.—*Plectranthus zeylanicus*.

Satavaariye do.—*Asparagus racemosus*.

Ahu do.—*Morinda citrifolia*.

Welaa do.—*Gynandropsis pentaphylla*.

Nike do.—*Vitex Negundo*.

Then add a similar quantity of cocoanut milk, thus you will have the two compositions of the juices and cocoanut milk—all the three in equal proportions.

Next add so much of the following oils, to be taken in equal quantities—as will be proportionate to one-eighth of the whole of these liquids.

Castor oil.

Mee oil—*Bassia longifolia*.

Cow-ghee.

Kohmbe oil—*Margosa*.

Lastly make the "*Kalke*" of the following ingredients, which must, when ground together, equal one-fourth of the oils.

Kaluduru—Black cummin seed.

Sududuru—White cummin seed.

Suduloonu—Garlic.

Perunkaayan—*Assa fœtida*.

Kraboe—Clove.

Wasawase—Mace.

Sadikka—Nutmeg.

Asemodegan—Parsley.

Pepiliye—*Hedyotis racemosa*.

Nerivisse—*Aconitum ferox*.

Palmaanikkan—Blue vitriol.

Savindehunu—Rock salt.

Welmee—Liquorice.

Abing—Opium.

Harankaha—*Curcuma zerumbet*.

Atkaha—Turmeric.

Arelu—*Terminalia Chebula*.

Bulu—*Terminalia Belerica*.

Nelly—*Phyllanthus Emlica*.

Inguru—Ginger.

Kattecumathal—*Frankincense*.

Jataamaanse—Indian spikenard.

Wadekaha—*Acorus calamus*.

Sevenne roots—*Andropogon muricatum*.

Iriveriye roots—*Plectranthus zeylanicus*.

Hingurupiyely—*Kempferia Galanga*.

Vildummella—A species of resin.

Boil these for seven days, using cinnamon wood for fuel.

#### VIRTUES.

To be rubbed on the head and applied to the ear and nose in all cases of Sanny. This oil will readily restore warmth. It is also very efficacious in cases of cholera, for restoring warmth and relieving cramps.

---

#### No. 12.—*Gadu Tiele*.

Take the Juices of Muruwa leaves, *Marsdenia tenacissima*; Magulwaaraa Do.—a species of *Adenanthera*, in equal quantities, and cocoanut oil equal to a quarter of both these Juices put together.

#### *Kalka*.

Sududuru—White Cummin seed

Kaluduru—Black Cummin seed.

Kondegan—Sulphur.



Suduloonu—Garlic  
Boil these three days.

VIRTUES.

Cures all incipient boils, when rubbed and fomented with burnt salt.—

No. 13.—*Brungamaleke Tiele.*

Take the Juice of Kekirindie—*Eclipta erecta*, and  
Nelly fruit—*Phyllanthus Emblica*  
With cow milk and Sessamum oil

All in equal quantities; mix them together, and to the weight of one-sixty-fourth of this composition, take *Welmee*, liquorice which being ground, must be boiled with the liquids, for three days.

VIRTUES.

Relieves heat in the head and eyes, attended with constant flow of tears, blackens the hair and cures all headaches, to be rubbed on the head.

No. 14.—*Seepathe Tiele.*

Make the First decoction of the bark of the *Maadam tree*—*Syzygium Jambolanum*.

SECOND DECOCTION.

Sessamum oil equal to  $\frac{1}{4}$  of the First decoction.

*Kalka.*

Inguru—Ginger.  
Miris—Pepper.  
Tippily—Long Pepper.  
Arelu—*Terminalia Chebula*.  
Bulu—*Terminalia Belerica* fruit.  
Nelly—*Phyllanthus Emblica*.  
Wenevel—*Coscinium fenestratum*.  
Kaha—Turmeric.  
Boil these for three days.

## VIRTUES.

A cure for *Elephantiasis*. The oil should be rubbed on the head and the legs, twice a day. This application must be continued for one month, when it is certain to give relief.

No. 15.—*Balakorande Tiele*.

## FIRST DECOCTION.

Bewille—*Sida* species.

Katokarendo—*Phoberos Cœrtnerii*.

## SECOND DECOCTION.

Sessamum oil equal to a quarter of the First decoction. Cow milk four times as much as oil.

Kalka Sandun—Sandal.

Kattekumatchal—Frankincense,

Kottan—*Aucklandia Costus*.

Ensaal—Cardamum.

Hingurupiyely—*Kempferia galanga*.

Iremusu—*Hemidesmus indicus*.

Agil—Logwood

Kideatuttan.

Satepuspe—*Anethum sowa*.

Amukkera—*Withania Somnifera*.

Jewecke—Seweya.

Vresembeke.

Jataamaanse—Indian spikenard.

Welmee—Liquorice.

Dewedara—*Pinus Deodar*.

Savindelunu—Rock salt.

Ratnetul—*Plumbago rosea*.

Asemodegam—Parsley.

Perunkayan—*Assa fætida*.

Tippily—Long pepper.

Munwenne.

Maswenna.

Inguru—Ginger.

Walga miris—Piper Sylvestre.

These must be taken in equal quantities and the whole when ground together must be equal to  $\frac{1}{2}$  of the oil.

VIRTUES.

For all pains in the system, nervous debility, and oppression in the chest. To be drunk and rubbed over the parts affected, and applied to the nose.

This paper was found among the Society's papers without any name attached to it.—It is believed to have been the production of the late Dr. Pieris of Kandy, who paid considerable attention to Native Materia Medica.

The Botanical names given of the plants have been corrected, and those not given added by Mr. Ferguson F. L. S.

---

**JOURNAL**  
**OF THE**  
**CEYLON BRANCH**  
**OF THE**  
**ROYAL ASIATIC SOCIETY.**

---

**1867—70.**

---

**COLOMBO:**  
**PRINTED BY F. FONSEKA, CHATHAM STREET, FORT.**  
**1870.**



# CONTENTS.

|                                                                                                                                                                                                                                             | PAGE.        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Office Bearers                                                                                                                                                                                                                              | v.           |
| Rules of the Society                                                                                                                                                                                                                        | vii.         |
| Do. Library                                                                                                                                                                                                                                 | xi.          |
| Do. Museum                                                                                                                                                                                                                                  | xii.         |
| List of Members.                                                                                                                                                                                                                            | xiii.        |
| Treasurer's Account from 4th December 1867, to 22nd March 1870                                                                                                                                                                              | xv.          |
| Proceedings of Meetings                                                                                                                                                                                                                     | ...xvii.—xl. |
| On the Origin of the Sinhalese Language.—By James De Alwis, Esq., M. R. A. S.                                                                                                                                                               | 1            |
| A Lecture on Buddhism.—By the Rev. D. J. Gogerly, with Notes by the Rev. David De Silva                                                                                                                                                     | 87           |
| Description of two Birds new to the recorded Fauna of Ceylon.—By H. Nevill, Esq.                                                                                                                                                            | 138          |
| Description of a new Genus, and five new species of Marine Univalves from the Southern Province, Ceylon.—By G. Nevill, C. M. Z. S., and H. Nevill, Hon. Sec. R. A. S. (C. B.), F. Z. S....                                                  | 141          |
| A brief notice of Robert Knox and his companions in captivity in Kandy for the space of twenty years, discovered among the Dutch Records preserved in the Colonial Secretary's Office, Colombo, and translated into English.—By J. R. Blake | 143          |
| Summary of the Contents of the First Book in the Buddhist Canon called the Párájika Book.—By the Rev. S. Coles                                                                                                                              | 151          |
| Párájika Book—No. I.                                                                                                                                                                                                                        | 164          |
| Párájika Book—No. II.                                                                                                                                                                                                                       | 180          |



OFFICE BEARERS OF THE CEYLON BRANCH  
OF THE  
ROYAL ASIATIC SOCIETY.

---

PATRON:

His Excellency Sir HERCULES G. R. ROBINSON, K. C. M. G.

PRESIDENT:

Capt. A. B. Fyers, R. E.

VICE-PRESIDENTS:

The Rev. Barcroft Boake, D. D.

C. P. Layard, Esq.

COMMITTEE:

|                      |                      |
|----------------------|----------------------|
| T. B. Stephen, Esq.  | Keppel Jones, Esq.   |
| R. Dawson, Esq.      | C. L. M. Brown, Esq. |
| Rev. J. Scott        | W. Skeen, Esq.       |
| James D' Alwis, Esq. | W. Bryan, Esq.       |
| J. Capper Esq.       | Dr. Koch.            |

R. V. Dunlop, Esq.—*Treasurer.*

|                                |                       |
|--------------------------------|-----------------------|
| Lieut. Vincent W. Legge, R. A. | } <i>Secretaries.</i> |
| Lionel F. Lee, Esq.            |                       |

Mudaliyar L. De Zoysa.—*Librarian.*





## RULES AND REGULATIONS OF THE SOCIETY.

---

[*Mcm.*—The Asiatic Society of Ceylon was instituted 7th February, 1845 ; and by the unanimous vote of a Special General Meeting of the Royal Asiatic Society, held on the 7th February 1846, it was declared a Branch of that Society, under the designation of the Ceylon Branch of the Royal Asiatic Society.]

1. The design of the Society is to institute and promote inquiries into the History, Religion, Literature, Arts and Social Condition of the present and former inhabitants of this Island, with its Geology and Mineralogy, its Climate and Meteorology, its Botany and Zoology.

2. The Society shall consist of resident or ordinary, honorary, and corresponding Members ; all elected by ballot at some General Meeting of the Society.

3. Members residing in any part of Ceylon are considered resident.

4. Persons who contribute to the objects of the Society in an eminent and distinguished manner, are eligible as Honorary Members.

5. Persons residing at a distance from Colombo may, upon special grounds, and with the recommendation of the Committee, be elected Corresponding members.

6. Honorary and Corresponding members shall not be subject to any fee on entrance, or any annual contribution, and are to be admitted to the meetings of the Society, and to the privilege of the Library, but are not to vote at meetings, or be elected to any of its offices, or take any part in its private business.

7. All Military Medical Officers resident, or who may reside, in Ceylon, are Honorary Members of the Society without entrance fee or Subscription.

8. Every ordinary Member of the Society shall pay, on admission, an entrance fee of half a guinea, and an annual subscription of one guinea. Annual subscriptions shall be considered due on the 1st of January of each year. Members who fail to pay their subscriptions by the end of the year (provided they have been called for), shall be considered to have relinquished their connection with the Society.

9. The privilege of a Life Membership may be ensured by the payment of £10 10s., with entrance fee, on admission; £8 8s., after two years; and £7 7s., after four or more years' subscriptions.

10. The Office-bearers of the Society shall be, a President, two Vice-Presidents, Treasurer and Secretary, with a Librarian, Curator of the Museum, and Conservator of the Meteorological and other scientific instruments of the Society :—all appointed from time to time by open vote at some General Meeting of the Society ; and their functions shall be as follows .—

- [1.] The President, and in his absence one of the Vice-Presidents, shall take the Chair at all meetings of the Society and of the Committee, maintain order, collect the votes, and cause the laws of the Society to be observed and enforced.
- [2.] The Treasurer shall receive, collect, and pay out all monies on behalf of the Society, keep an account thereof, with the vouchers, and submit a statement of the pecuniary affairs of the Society to the Anniversary Meeting, and at other times as may be required.
- [3.] The Secretary shall arrange, give notice of, and attend, all meetings of the Society and of the Committee, and record their proceedings ; he shall also edit the Journal, and exercise a general superintendence under the authority of the Committee.
- [4.] The Librarian, Curator of the Museum, and Conservator of the Scientific Instruments belonging to the Society, will

take charge of the books and other articles committed to them respectively, keep a correct list thereof, and generally conform in their management to the Rules of the Society in that behalf, or in the absence of such, to the directions of the Committee ; having respect at all times to the safety and proper condition of the articles, and to the interests of the Society in their increase and improvement : The Curator of the Museum, in particular, taking care to superintend the reception of all articles in that Department, transmitted to the Society, and have the same speedily submitted to examination and reported on, and suitably arranged.

11. The affairs of the Society shall be managed by a Committee of nine Members, (with power to add to their number), in addition to Office-bearers, elected in like manner ; but subject always to the Rules and Regulations passed at General Meetings ; three to be a quorum.

12. Members desirous of proposing persons for admission to the Society shall give notice of the same to the Secretary, in writing, at least a fortnight before the assembly of a General Meeting. Admission to Membership of the Society shall be by Ballot at any General Meeting. No candidate to be considered as elected, unless he has in his favour two-thirds of the votes taken.

13. A General Meeting of the Society shall be held Quarterly namely, on the 7th day of February or first lawful day thereafter, and in the first week of the months of May, August and November, and at such other times as may be determined by the Committee : due notice of the Meeting, and of any intended motion which does not come through the Committee, except the nomination of new Members, being always first given by the Secretary.

14. All papers and communications to the Society shall be forwarded to the Secretary at least a fortnight before the assembly of the General Meeting at which they are to be submitted ; when they shall

be read by the Author, or in his absence by the Secretary, or some Member of the Society.

15. All papers and other communications to the Society read or submitted at any General Meeting, shall be open to free discussion; and such papers shall be printed in the Transactions of the Society as shall have been approved of by the Committee on Papers.

16. The course of business at General Meetings shall be as follows:—

- [1.] The Minutes of the last Meeting shall be read by the Secretary, and signed by the Chairman.
- [2.] Reports of Committees shall be read, and communications made of all articles received, and donations to the Society.
- [3.] Any specific or particular business submitted by the Committee, or appointed or open for consideration, shall be proceeded with.
- [4.] Candidates or new Members shall then be proposed, ballotted for, and admitted or otherwise, as the case may be.
- [5.] Papers and Communications for the Society shall then be read.

17. Special Committees may be formed for the prosecution of any specific object or matter of research; but these must be named at a General Meeting; and they will act as much as may be in co-operation with the Secretary of the Society, who will also be a constituent Member of all such Committees.

18. Every Member of the Society has the privilege of introducing, either personally or by a card, one or two visitors to the General Meetings.

19. One copy of each Journal shall be sent by the Secretary to every Member who has paid his Subscription for the current year, and to every Honorary member resident in Ceylon, and every such Member may procure a second copy, on application to the Secretary.

Members requiring more than two copies of the Journal, can be supplied with them at half the price charged to the Public.

20. Evening Meetings shall be held once a month, or at other times as may be arranged, for discussion on papers read, or to be read at General Meetings, (such papers however not necessarily being before the Meeting,) the mutual improvement of the Members, and the promotion of the objects and advancement of the interests of the Society.

21. Members who have been absent from Ceylon, on their return to the Island, have the privilege of rejoining the Society within 12 months of their arrival, on payment of the Subscription for the current year.

22. It shall be competent for any General Meeting to suspend temporarily any of the above Rules.

---

## RULES OF THE LIBRARY.

---

1. Books borrowed from the Library shall be duly entered in the Receipt Book, with the date of giving out, and the date of the return, which latter shall be initialled by the Librarian.

2. No book to be written on, or injured in any respect whatsoever, and every book borrowed shall be returned in proper condition, as received.

3. The period for which books borrowed may be kept shall be as follows :—

[1.] Periodicals, and numbers or volumes of a series, while they remain unbound, for 14 days only, and no more.

[2.] Books and Periodicals must be returned at the end of the month in which they were issued, to enable the Librarian to

verify his Catalogue. Members not residing in Colombo may retain a book for a period not exceeding three months. But

[3.] All books borrowed, of whatsoever description the same may be, shall be returned to the Library one week at least before the 7th of February in every year,—that pamphlets and serials may be bound up, and the Catalogues corrected ; and that a proper Report on the state of the Library may be prepared for the Anniversary Meeting.

4. Dictionaries, and works of reference, or of especial rarity or value, do not go out : they remain in the Library for use or inspection ; and Periodicals lie on the table for one week.

5. All works in the Library, or on the table of the Society, may be seen and consulted by Members, and also by others properly recommended, with the leave of the Librarian, or of his assistants under his direction.

## THE MUSEUM.

No article under the charge of the Curator of the Museum, or of the Conservator of Scientific Instruments belonging to the Society, shall be moved or touched but by the Curator and Conservator respectively, or their assistants under their express direction.

## LIST OF MEMBERS:

Alwis, A. D'  
 Alwis, James D'  
 Andree, H. D.  
 Andree, R., M.D.,  
 Armitage, G.

Bacon, Rev. J.  
 Bailey, Rev. J. H. B.  
 Becket, T. W. N.  
 Bell, A. J.  
 Birch, J. W.  
 Blake, J. R.  
 Boake, Rev. B., D.D.  
 Boake, W.  
 Both, C.  
 Bowling, G. A. L.  
 Brighthouse, J., M. D.  
 Brito, C.  
 Brodie, J.  
 Brodie, W. C.  
 Browne, Capt. Horace A.  
 Brown, R. L. M.  
 Bryan, W.

Campbell, A.  
 Capper, J.  
 Catto, J.  
 Coles, Rev. S.  
 Coomara Swamy, M.  
 Creasy, Hon'ble Sir E.  
 Curtayne, J. B.

Davids, Rhys (life member.)  
 Dawson, R. (life member.)  
 De Saram, C.

De Saram, F. J.  
 Dias, C.  
 Dias, H.  
 Dickman, C.  
 Drieberg, J.  
 Dunlop, R. V.

Ferdinands, C. L.  
 Ferguson, A. M., (life mem-  
 Ferguson, W. ber.)  
 Ferguson, J.  
 Foulkes, S. W.  
 Fyers, A. B. Capt. R. E.

Gabriel, H. D.  
 Gill, T.  
 Gillman, H. W.  
 Goonetillike, W.  
 Gower, E.  
 Green, Staniforth  
 Grenier, S.  
 Grinlinton, J. J.  
 Guthrie, J.

Hawkins, G. H.  
 Herbert, W. H.  
 Home, J. W.

Jayasinghe, Cornelis  
 Jones, Keppel

Karunaratne, C. F. W.  
 King, Æ. A.  
 Koch, E. L.



Layard, C. P.  
 Leechman, G. B.  
 Ledward, C. H.  
 Lee, Lionel F.  
 Legge, Vincent W., Lt. R.A.  
 Loos, C., M. D.  
 Lorenz, C. A.  
 Ludovici, L.

Mackwood, F. W.  
 Maitland, J.  
 Marsh, J.  
 Martensz, J.  
 Mendris, G.  
 Mill, Rev. J.  
 Mitchell, J. C.  
 Morgan, Hon'ble R. F. W.  
 Morgan, R. H.  
 Mutukistha, H. F.

Nevill, Hugh.  
 Nicholson, Rev. J. (life member.)  
 Nicholls, G.

O'Halloran, C.  
 Ondaatje, W. C.

Perera, Rev. H.  
 Prins, J. F.  
 Prescott, W.  
 Pieris, J. M. P.  
 Pole, H.

Rains, S. W., (life member.)  
 Richmond, S. T.  
 Robertson, W. R.  
 Robinson, E.

Scott, Rev. J.  
 Sharpe, W. E. T.  
 Skeen, W.  
 Skeen, W. L. H.  
 Slorach, J.  
 Sparkes, C. S.  
 Spitteler, A.  
 Stephen, T. B.  
 Stewart, C. H.  
 Steward, G.

Tatham, C.  
 Thwaites, G. H.

Venn, J. W.

Wall, G.  
 Whyte, A.  
 Wijaysinha, Mudaliyar L.  
 Winzer, J.  
 Woodward, Lieut. R.E.

Young, J. D.

Zoysa, Mudaliyar L. De

---

### *Honorary Members.*

---

Childers, R. C.  
 Holdsworth, E.

Military Medical Officers,  
 while resident in Ceylon.

N. B.—Members are requested to give notice to the Secretary, in writing, on their leaving Ceylon for any length of time.





PROCEEDINGS  
OF  
MEETINGS OF THE CEYLON BRANCH  
OF  
THE ROYAL ASIATIC SOCIETY.

---

*Committee Meeting, November 6, 1866.*

---

Rev. B. Boake, Vice-President, in the Chair.

Messrs. C. P. Layard, R. Dawson, W. Ferguson, G. S. Steward.

Mr. Layard informed the Committee that Mr. Barnes had offered the Society his entomological collection, if proper means for preserving it were in the Society's hands ; and Mr. Layard was asked to write to Mr. Barnes and say that the Society would accept his offer.

The Committee gave permission to Mr. Layard to borrow the Native fibres and oils in the Society's Museum, to exhibit at the approaching Agri-Horticultural show.

It was settled that the price of each issue of the Journal to members should be 2s. 6d.,—to non-members, 4s.

---

*Committee Meeting, November 22, 1866.*

R. Dawson, Esq., in the Chair.

Messrs. De Zoysa, Primrose, and Steward.

The following papers were laid on the table :—

Engineer's Journal for June, July, August and September,  
1866.

The Rev. Barcroft Boake, who acted as Secretary, opened the proceedings by stating that he had reason to believe that the public in Ceylon entertained a very low opinion of the value of the labours of the Society, and that he would therefore read the following extract from a letter which he had received by the last Mail from Sir Emerson Tennent, in order to shew the opinion entertained by one so eminent in literature, respecting the value of the Journal recently published by the Society :—

“To-day, the Post brought me the No. of the Journal of the Ceylon Branch of the Royal Asiatic Society for 1865-6, and I am indebted to you for a rare treat. I have done what I can seldom do, I have read it almost *twice* over, before I could lay it down. I never in any one volume, got so much genuine and new information about Ceylon. In addition to your own excellent contributions, which I already know so well, there is that extraordinarily clever paper of Silva Gooneratne, Mudaliyar, on Demonology, full of observation and knowledge. Then Mr. D’Alwis on the Origin of the Siphalese Language, abounding in learning and good sense. In fact every paper in the No. is excellent, and I have heartily to thank you for remembering me in sending it.”

Mr. J. D’Alwis stated that he had received similar letters from several eminent European Orientalists, and especially from the Secretary of the Parent Society, expressing the interest with which the numbers of the Ceylon Journal are received in Europe.

The following Resolutions were then adopted :—

1.—That twelve copies of the Journal be sent to Messrs. Trübner and Co. ; and the same number to Messrs. Williams and Norgate, to be disposed of, at 5s. each.

2.—That a sum of Thirty Pounds, or such smaller sum as the Treasurer may report to be available, be set apart for purchasing books of reference on Natural History, and that Mr. Holdsworth, Mr. F. M. Mackwood, Mr. H. Nevill, and Mr. W. Ferguson, be requested to act as a Sub-Committee, for laying out that sum to the best advantage.

3.—That the Secretary be requested to communicate with the Secretaries of the Parent Society, the Bombay Branch, and the Asiatic Society of Bengal, for the purpose of completing the imperfect sets of the Journals of those Societies which are at present in the Library.

4.—That Mr. Hawkins be requested to communicate to Mr. Barnes this Society's thankful acceptance of his collection of Lepidoptera, and that Mr. F. M. Mackwood be requested to make arrangements for its preservation.

5.—That the Secretary be requested to make a commencement of printing the next number of the Journal, by placing the continuation of Mr. James D'Alwis's paper on the Origin of the Siphalese Language, in the Printer's hands.

The following gentlemen were elected members of the Society :—

Lieut. Woodward, R. E., Captain D. Graham, Messrs. Becket, C. De Saram, S. W. Foulkes, Rhys Davids, E. L. Koch, L. Wijesinhe Mudaliyar, Ratnapura ; H. Dias, W. R. Robertson, Percy H. Alven, W. J. W. Heath, and the Rev. H. Perera.

6.—That Lieut. Woodward be requested to undertake the office of Secretary.

Several members having expressed their regret that the custom of holding Evening Meetings or *Conversazioni* had been relinquished, Mr. Lorenz proposed that a *Conversazione* in connection with this Society should be held at his house at 8 o'clock on the evening of Friday, February 22nd, which proposition was unanimously agreed to.

A suggestion having been made, that some persons were likely to be deterred from attending the Society's *Conversazioni* by an idea that none but subjects connected with Oriental Literature were admissible for discussion in them, the sense of the meeting appeared to be that, in order to make the Evening meetings more attractive, any subject connected with general literature, with science, or with art, should be considered to be admissible.

Mr. Blake promised to read to the Meeting at Mr. Lorenz's an unpublished letter from the celebrated Robert Knox, which he had found amongst the Archives in the Colonial Secretary's Office.

*Evening Meeting.*

An Evening meeting of the Society was held, on the 22d February, at the residence of C. A. Lorenz, Esq., Ely House.

Mr. Boake exhibited two young Crocodiles which he had succeeded in hatching from eggs found by him.

Mr. Blake read the letter from Robert Knox, found by him in the Archives of the Colonial Secretary's Office.

The Rev. Mr. Boake called the attention of the meeting to the quantities of resin in small globules found among the sand on the shore at Mount Lavinia. He said that Mr. H. Nevill, who had paid some attention to the subject, had found the same globules at Ballipitmodera, where he had also found large lumps of the same substance in the swamps and backwaters. He considered them fossil, and thought they might throw some light on the nature of Amber found on the German coasts of the Baltic. There was however this difference between them, that whereas Amber swam in water, these sank.

Dr. Ondaatje said that in the paddy fields near Cotta, masses of a resinous nature had been found near the trunks of a particular kind of tree buried in the swamp, but now no longer growing there.

Mr. Dawson said that in New Zealand great quantities of a similar resin were found, and were exported as an article of commerce, being very extensively used in England as a valuable varnish. It is called Kauri gum. The Kauri tree is still a valuable forest tree in New Zealand. He had seen a spar 104 feet long and 4 feet square at the butt, landed at Trincomalee. But it is strange that no Kauri gum is found where the trees are still growing, but only in parts where they formerly grew, and now bare of them.

Mr. Wall asked Mr. Boake, if he knew of the Dúm gum, exuded from the tree of that name, and whether there was any thing in common between that gum and the resin he had observed on the beach. Mr. Clerihew, a well known planter, had unsuccessfully endeavoured to make the natives collect it as an article of commerce.

Mr. Boake had not observed any similarity between the Dúm gum and that found on the beach. He would however allude to a valuable

secret said to be possessed by the Buddhist priests. Every one knows how soon insects got into books in Ceylon, unless the latter were very carefully looked after. Now he had often observed how free the óla books of the Buddhist temples and Viháras were from the ravages of these insects, an immunity to be wondered at, as the thick vegetable óla leaf seemed peculiarly liable to their attacks. These books smelt very strong of some resinous substance, and he was informed that the priests used some preparation of resin, it might be from the Dúm tree, to preserve their ólas from the insect. He had himself tried it, but unsuccessfully, on books.

Dr. Ondaatje said that the gum used for the purpose named by Mr. Boake, by the priests, was well known in Ceylon. It was from a kind of Hal tree.

A discussion took place as to whether the resin was a normal or a morbid production of the Dúm tree. Dr. Ondaatje held the former view, Mr. Boake, Mr. Wall, and Mr. Ferguson, the latter.

---

*General Meeting, 31st August, 1867.*

Rev. B. Boake, Vice-President, in the Chair.

Rev. J. Mill, Messrs. Skeen, De Zoysa, Heath, Ferguson, Holdsworth and Lorenz :—

The Minutes of the former Meetings were read over by the Secretary.

A work by Dr. Balfour on the Forest Trees of Southern India, presented by the Government of Ceylon, was laid on the Table.

A bronze box found under the ruins of a Dagoba near Avissáwellā was presented to the Society by Mr. Rhys Davids. The thanks of the Society were ordered to be given to Mr. Davids; and it was resolved to enquire whether the stone covering the box could be brought, at a moderate expense, to the Society's Rooms.

A letter from Mr. Hawkins resigning his post as Curator was read. The Secretary also laid his resignation before the Meeting.



The resignations were accepted, and Mr. Nevill was appointed Secretary, with Mr. Skeen as his coadjutor in Colombo. Mr. W. Boake was requested to act as Curator.

The Rev. B. Boake, Rev. J. Mill, Mr. Holdsworth, Lieut. Woodward, and Mudaliyar De Zoysa, were appointed a Committee on Papers.

It was resolved, that the Secretary should take such steps as he should think fit, to increase the sale of the last number of the Society's Journal among the general public, it being understood that an impression prevails that it is out of print.

The following Gentlemen were then elected members of the Society :—

Rev. J. Bacon; Dr. Loos; Messrs. H. M. Christopher, W. Boake, J. Ferguson, L. Lee, C. Both, A. Spittler, C. O'Halloran, and the Rev. Mr. Lovekin.

*Committee Meeting, October, 5th, 1867.*

Rev. B. Boake, Vice President, in the Chair.

Messrs. C. P. Layard, A. Primrose, W. Boake, Mudaliyar Zoysa, and W. Skeen.

Read a letter from the Rev. Mr. Lovekin thanking the Society for electing him as a member, but declining the honor. The Rev. Barcroft Boake explained that Mr. Lovekin was proposed by him, under the erroneous impression that he had expressed a wish to that effect.

The Rev. Barcroft Boake stated that he had requested Mr. Skeen to call the Committee together, in order to consider the propriety of requesting Mr. Nevill to inform Messrs. Williams and Norgate, who have published a book under the title of the Song of Solomon by Satyam Jayati, that no person bearing that name is at present, or has ever been, a member of this Society, and to request those gentlemen to take such steps as they may think fit for undeceiving the public on that point. The Committee approved of Mr. Boake's suggestion.

Resolved, that Mr. Alwis be requested to expend a sum not exceeding £15, at his discretion, in purchasing books at the sale that has been advertised by Mr. Gabriel, especially Wight's two Works on Indian Botany, Prinsep's Indian Antiquities, and Vans Kennedy's Comparison of the Mythology of India and Europe.

The Secretary laid before the Committee a Work on Chronology by Cowasjee Patell, presented to the Society by the Ceylon Government.

Resolved, that the Secretary convey the thanks of the Society to the Government for the donation.

*Committee Meeting, November 16, 1867.*

Rev. B. Boake, Vice-President, in the Chair.

Messrs. W. Boake, James D' Alwis, Mudaliyar L. De Zoysa and W. Skeen.

Proceedings of the last Meeting read and confirmed.

The Secretary stated that he had called the meeting principally for the purpose of appointing a Treasurer in the place of Mr. Primrose, who had resigned, in consequence of his removal to Kandy.

A list of 22 books was handed in, bought at Mr. Gabriel's, in accordance with the vote of the last meeting; they consisted of the following:—

|                                             | £     | s. | d. |
|---------------------------------------------|-------|----|----|
| Icones Plantarum Indiæ Orientalis, 6 vols.  | 7     | 10 | 0  |
| Day's Malabar Fishes ...                    | 1     | 10 | 0  |
| Wight's Indian Botany, 2 vols. ...          | 3     | 10 | 0  |
| Vans Kennedy's Hindu Mythology ...          | 0     | 15 | 0  |
| The Sankhya Karika, by Iswara Krishna       | 0     | 6  | 0  |
| Prinsep's Indian Antiquities, 2 vols....    | 1     | 5  | 0  |
| The Dabistan, or School of Manners, 3 vols. | 0     | 15 | 0  |
| Hampson's Origines Patricia ...             | 0     | 4  | 0  |
|                                             | <hr/> |    |    |
|                                             | £15   | 15 | 0  |

*d*

|                                      | £     | s. | d.   |
|--------------------------------------|-------|----|------|
| Brought forward                      | ...15 | 15 | 0    |
| Wight and Arnott's Prodrromus Floræ  |       |    |      |
| Peninsulæ Indiæ Orientalis           | ...   | 0  | 5 0  |
| The Sankitâ, or the Sama Veda        | ...   | 0  | 6 0  |
| Thorpe's Northern Mythology, 3 vols. |       | 0  | 12 0 |
| Total...                             | £16   | 18 | 0    |

For which the Bookseller, Mr. Gabriel, accepted £15.

Nos. 117 and 118 of the *Annals and Magazine of Natural History* were laid on the Table.

Also : a letter from Henry Tottie, Esq., Acting Consul at the General Consulate of Sweden and Norway, enclosing receipts for a parcel of Books forwarded to the Society by the Secretary of the Royal University of Christiana.

And a number of the Hindu Commentary.

The Committee sanctioned the payment of a Bill of £1 1s. 0d., for binding.

The Secretary submitted a paper by Mr. Blake,—a letter from Robert Knox, hitherto unpublished.

The Vice-President submitted a paper by Mr. Nevill, on two new birds.

The Secretary submitted an English Metrical version of the *Sela-lihini Sandése*.

Resolved, that all the papers be referred to the Committee on Papers.

The Committee requested the Secretary to act as Treasurer, until the next General Meeting.

Mr. D' Alwis intimated his intention of inviting the Members of the Society and their friends to an Evening Meeting at his house.

Resolved.—That all books belonging to the Library in the possession of Members be called in twice a year, in the months of May and December.

*Evening Meeting.*

An Evening meeting was held at Mr. D'Alwis's residence, 5, Silversmith Street, on the 28th November; about 30 members and friends were present.

Numerous interesting articles were exhibited, consisting of Coins, Olas, specimens of Natural History, and works of Art; and a general conversation took place upon the topics which they gave rise to.

*General Meeting, November 29, 1867.*

Rev. B. Boake, Vice-President, in the Chair.

Messrs. W. Ferguson, F. Mackwood, J. R. Blake, Rev. C. Merson, Mudaliyar De Zoysa, Dr. Ondaatje, and Mr. W. Skeen.

Minutes of preceding Meetings read and confirmed.

Mr. C. O'Halloran was appointed Treasurer, in place of Mr. Primrose, resigned.

The Vice-President and members requested that the Secretary should make inquiries respecting the order for supplying the Society with the Engineer Journal, which was ordered to be discontinued, although no such Minute appears in the Proceedings of the Society.

Dr. Ondaatje intimated his intention of drawing up a paper upon the comparative differences in the skulls of the African, Northern, and Asiatic races of mankind.

The Rev. The Vice-President, the Rev. C. Merson, Messrs. F. Mackwood, J. D'Alwis, and the Librarian, were appointed a Committee for the revision and re-arrangement of the Library and the Catalogue.

Resolved.—That a sum of £10 be voted towards reprinting the numbers of the Journal which are out of print.

The following Gentlemen were then elected members of the Society:—

The Rev. J. Scott, Rev. David De Silva, Messrs. W. H. Herbert, and H. C. Hancock.

*Committee Meeting, May 27, 1868.*

Rev. B. Boake, Vice-President, in the Chair.

The Minutes of the last Meeting were read and confirmed. It was proposed by the Secretary, that a new seal be procured for the Society.

A letter was read from the Secretary, Mr. Nevill, containing suggestions about the proposed Report of the Proceedings of the Society.

Also, from the Rev. De Zylva requesting copy of the last Journal.

Resolved,—That Mr. Nevill be communicated with about the Museum and the Journal, and Mr. Williams, of the Medical Store Department, respecting a Catalogue of the specimens in the Museum.

The state of the Funds not allowing the Society to pay a regular salary for a qualified Curator, it was considered that a representation should be made to the Government upon the subject, soliciting assistance.

It was resolved, that the Rev. De Zylva be requested to furnish an Introduction, Notes, or additional illustrative matter to the late Rev. D. J. Gogerly's Lecture on Buddhism, which it is proposed to print in the forthcoming Journal :

Also, that the Rules of the Society be reprinted :

That the state of the Library be reported upon, the Secretary to be added to the Library Sub-Committee :

That the glasses containing preserved specimens of Natural History be filled up with fresh spirits :

That the almirahs be shifted, the position of the cases altered, and all the arrangements made that were possible to obtain more space and better light for the specimens in the Museum ; as well as to find space for the remaining specimens which have to be removed from the Military Medical Store Department.

The following letter from Mr. C. H. De Soysa, was then read.

To the Secretary of the Royal Asiatic Society, Ceylon Branch.

DEAR SIR,

I have the pleasure of sending my old Peacock, "carefully stuffed,"

as a gift to the Royal Asiatic Society, Colombo, and hope you will have no objection in receiving it to be placed in the Museum; and also beg to state, that I shall be very glad to send in future some other specimens that may be useful for the place.

I have, &c.

C. H. DE SOYSA.

Resolved.—That the thanks of the Society be communicated to Mr. De Soysa, by the Secretary.

---

*Committee Meeting, August 15, 1868.*

Rev. B. Boake, Vice-President, in the Chair.

Messrs. C. P. Layard, W. Ferguson, J. D' Alwis, C. O'Halloran, Hugh Nevill, W. Skeen, and Mudaliyar De Zoysa.

The Minutes of the last meeting were read and confirmed.

Resolved, That interesting papers be for the future published as they are received and decided upon by the Committee on Papers, without waiting for other papers to form a volume :

That special Curators be appointed from time to time to act in communication with the Curator, for the arrangement and preservation of the different departments of the Society's Museum :

That Mr. W. Boake's resignation of his office of Curator be accepted; and that the thanks of the Society be given him for his past services :

That Mr. Skeen, Assistant Secretary, be requested to act as Curator; Mr. Skeen having signified his willingness to accept the office.

The Assistant Secretary reported the proceedings he had taken for re-arranging the Museum.

A letter was read from Captain Horace A. Broune, of Moulmain, Burmah, requesting the co-operation of the Committee and Members of the Society, in ascertaining whether or not there existed in Ceylon any work in the Páli language, corresponding with the "Manoo-Kyay-Dharma-That," (the Dharma Sastira of Manoo); a judicial work of

authority amongst the Burmese, which Captain Broune believes to have been originally brought from Ceylon. To assist in the enquiry, he enclosed the following

*Memorandum on the Laws of Menu.*

“ Among the literature of Burmah there exists a book entitled ‘Manoo-Kyay-Dharma-That.’ (The Dharma Sastra of Manoo.) This book, together with much matter that is now entirely obsolete and useless, and much indeed that could never have been in force in Burmah, contains many provisions which constitute the *lex loci* of Burmah, as regards inheritance, marriage, adoption, divorce, &c., &c.

Much of the book has been translated from the Páli, but there are other passages which seem to have been interpolated in more modern days; and there are others again whose origin cannot be fixed with any degree of certainty. None of it corresponds with the ‘Institutes of Manoo,’ as translated from the Sanscrit. The original ground-work of the book was no doubt at some time brought to this country from Ceylon; and it will be useful and interesting to ascertain whether there is still extant among the Páli literature of that Island any work at all corresponding with the Burman ‘Laws of Manoo.’ The different copies of this book as found among the palm leaf libraries of the Burman monks, vary considerably; the editors and copyists having from time to time made omissions, amplifications, and additions, to suit their own opinions or purposes. About twenty years ago, the best obtainable edition was printed for the use of the judicial officers of this Province. The following is a slight sketch of the contents of the work, which may be sufficient to identify it with the original, if that still exists in Ceylon. The work commences with a description of the Genesis of the present world, taken, as is stated in the work, from the Melinda pinya. It describes the gradual creation of the solar system; the first appearance of mankind, who at first had no fleshly appetites no need for eating, and no distinction of sex among them, and their gradual degeneration, till at last it was found necessary to erect a ruler in the earth, to keep in check the evil passions of its inhabit-

ants. This ruler was called Maha Thawada, because he was the Elect of many. In his days arose a learned cowherd, who from the age of seven years began to decide disputes among the people. His first twelve decisions are recorded, and relate to boundary disputes, thefts, damages, loans, interests, &c. Having decided a difficult case, in which the evidence was conflicting, by examining the witnesses apart, his fame reached the ears of the King, who sent for him, and much against his will, appointed him his Chief Justice. Six more of his decisions are then recorded. All of these, when pronounced, were applauded by both men and angels. The seventh case was about a small cucumber. Two men had gardens adjoining one another. A cucumber plant growing in one, spread into the other garden. The owner of the latter plucked the fruit. Manoo at first decided that he had the right to do so. At this decision angels and men were silent. Believing from this that he must have made mistakes, Manoo reconsidered his judgment, and decided that the owner of the root was also the owner of the fruit. On this both men and angels applauded. In consequence of this mistake, Manoo began to doubt his own infallibility, and obtained permission to become Pathaya. He went to live in a cave near the Mandageenee lake, and by virtue of his religious exercises obtained the first state of 'Zan,' and ascended into heaven. There, on the boundary wall of the world, in letters as large as elephants, he found the 'Dhamma That' inscribed. This he copied and gave to King Maha Thamada. Then follows the Dhamma-That in twelve books, a chaos of enactments on every subject. Various and often inconsistent provisions relating to cognate subjects, are scattered here and there throughout the book, and topics the most incongruous are jumbled up together, forming a strange *indigesta moles* of law and custom, ancient and modern, Hindoo and Buddhist. The provisions relating to adoption are found in four different parts of the work. Those on divorce in a dozen different places in juxtaposition with some other uncongenial subjects, such as debts or bailments, as if the book were simply a collection of *placita* of different judgments given in chronological sequence, and not



according to the subject matter of the judgments. Many of the terms used in the Hindoo law are adopted in the Burmese translation; thus, the legitimate son of a couple duly married is called Auratha. The two principal classes of adopted children Dieltaka and Kiettiema; step-children are Dweepooppakara. Mixed up with the positive legal enactments are many traditionary tales, illustrative of the application of the law."

"If the above slight sketch is sufficient to identify the book with any existing Páli works in Ceylon, a most interesting point would be ascertained."

The state of the Journal was inquired into; and Mr. Alwis stated about 100 pages were printed. The Assistant Secretary was requested to edit the Journal, and to complete the issue as quickly as possible.

The Treasurer stated that the balance in hand was £93 16s. 6d.

---

*Committee Meeting, November 23rd, 1869.*

The Secretary laid upon the Table the following books and periodicals received since the last meeting.

Quaritch's General Catalogue of Books, arranged in classes, 1868.

Hunter's Comparative Dictionary of the Non-Aryan Languages of India and High Asia.

Ferguson's Tree and Serpent Worship.

The Knuckles, a Poem, descriptive of a Mountain Range and Coffee Cultivation in Ceylon, by W. Skeen.

Classified Catalogue of Printed Books and Tracts in Siphalese, by J. Murdoch and the Rev. J. Nicholson.

Journals of the Bombay Branch of the Royal Asiatic Society.

Transactions of the Bombay Geographical Society.

The Publications and Journals of the Royal Philological and Ethnographical Institute for Netherlands India.

The Publications of the Royal University of Christiana.

6 Numbers of Trübner's American and Oriental Record.

Buddha and His Doctrines, a Bibliographical Essay.

8 numbers of the Annals and Magazine of Natural History.

The Secretary reported that 140 pages of the Journal were printed, and that it would probably be completed in a month; also, that the numbers of the Journal which were out of print were in course of being reprinted.

It was resolved, that a Special Committee meeting should be called in a few days to consider and adopt a report of past proceedings.

It was further resolved to call an Extraordinary General Meeting of Members on the 4th December.

A list of 10 names of gentlemen who wished to become members of the Society was laid before the Committee.

*Extraordinary General Meeting, December 4, 1869.*

R. Dawson, Esq., in the Chair.

The Rev. S. Coles, Messrs. A. M. Ferguson, W. Ferguson, J. Capper, C. A. Lorenz, Keppel Jones, Grenier, C. O'Halloran, and W. Skeen.

Mr. Skeen, on the motion of the Chairman, read the following report:—

The last General Meeting of the Society was held on the 29th November, 1867. Committee Meetings were subsequently held on the 27th May and the 1st August, 1868, and on the 23rd November, 1869, when it was resolved to call the present Extraordinary General Meeting.

The causes of so long a period elapsing between the last and the present General Meeting are similar to those which affect kindred Societies in Calcutta and elsewhere. Office Bearers and Members who have leisure and ability and take an interest in promoting the objects for which the Society was instituted, are removed from the Island, or to distant outstations, or by the hand of death; and a period of inaction sets in; the mere existence of the Society being cared for by a few residents in Colombo whose business avocations

prevent them from taking a more active or prominent position in its affairs.

The arrival of strangers, or the return to Colombo of old members, elicits a spirit of inquiry ; a renewed interest in the Society is kindled, and once more its proceedings are conducted with vigour papers of value are contributed ; the journal is issued ; and a fresh period of prosperity is entered upon.

That such an interest exists at the present moment is manifest by the number of gentlemen who have signified their wish to become members of the Society, and whose names will be submitted for ballot at the present Meeting. It may fairly be presumed that some amongst the number will be found both able and willing to contribute papers for publication in the Journal; and by this means sustain the reputation which the Society has won amongst the leading literati both in England and the continent of Europe. Now, more than ever before, Oriental scholars in the western world are investigating the languages, the literature, the religions, and the antiquities of India in general, and Ceylon in particular. Professor Max Müller, Dr. Rost, and Mr. R. C. Childers, one of our members resident in England, are engaged in translating ancient Páli works into English, while other eminent Orientalists are similarly occupied elsewhere; and the result is, that not only the learned few, but the unlearned many, are taking a most keen interest in all that concerns the religion and philosophy of Gautama Buddha—the prevalent native faith of the Siphalese, with the exception of those who inhabit the northern parts of the Island.

The forthcoming Number of the Society's Journal will be found to contain valuable contributions bearing on these subjects. An elaborate and exhaustive essay by James De Alwis, deals with the question of the Origin of the Siphalese language; on Buddhism the Society will find the last matured deliverances of their late lamented President, the Rev. D. J. Gogerly, with an Introduction by the Rev. J. Scott, and copious illustrations from the original Páli by the Rev. David de Silva:—there is, besides, a contribution by the Rev. S. Coles, which it is believed will throw a new and most unexpected light upon

the morality of Buddhism as propounded by Buddha himself. Papers by the Secretary on Ornithology and Conchology; and an hitherto unpublished letter by Robert Knox, written during his captivity in Kandy, will, with the proceedings of the Society since the issue of its last journal, complete a volume as interesting and important in its contents as any of its predecessors.

A pleasing proof of the estimation in which this Society is held in Europe is afforded by the following letter which accompanied a set of the journals to which it alludes:—

THE HAGUE, February, 1868.

The Royal Philological and Ethnographical Institute for Netherlands India, highly appreciating the valuable labours of your Society, and taking a deep interest in its scientific works, would consider it a privilege to entertain the same cordial relations,—especially by the interchange of publications,—as has been for some length of time established between the Institute and other scientific associations, among the number of which also the Royal Asiatic Society of Bengal ranges.

Our Board take the liberty of submitting this proposal to your consideration, and will feel much gratified if, by acceding to it, your Society will please to order the transmission of its periodicals or other works to this Institution.

In anticipation of a favorable answer, the Board beg your Society to accept of the last series of our Journal.

We remain most respectfully,  
Your obedient Servants,

P. BLEEKER, President.  
J. MILLARD, Secretary.

To the Ceylon branch of the Royal Asiatic Society.

A set of the Society's Journals, as far as can be completed, will be forwarded to the Royal Philological and Ethnographical Institute for Netherlands India, as well as to the Royal University of Christians, from whom a similar communication, and a variety of valuable publications have been received.

The attention of members is particularly directed to a communication from Captain Horace Broune of Maulmein, which will be found

printed in the Journal, on the supposed Singhalese origin of a Burmese work, called the "Laws of Manu." Communications of this kind are very desirable, inasmuch as they form subjects of inquiry and discussion, which are not only interesting in themselves, but lead to many and varied points that would otherwise elude the utmost vigilance of an individual.

Since the last General Meeting several important steps have been made towards a re-arrangement of the Museum. The Cabinets have been grouped, and numerous valuable specimens that, for want of available space, had been long lying uncared for in the Military Medical Stores, have, through the exertions of the late Curator and the Assistant Secretary, been transferred to and located in the Society's rooms, which however they now most inconveniently crowd.

It has been decided to solicit assistance to the Curator from members who may be willing to classify and arrange any branch of the varied collections in which they may take peculiar interest, as it has been found impossible for any merely honorary curator to give the time and trouble required to superintend directly, every branch. In accordance with this plan Mr. Nevill, the Secretary, has undertaken to arrange the shells, and probably other members will volunteer their services. The following additions have been made to the Museum since the last General Meeting.

In Natural history :—

A Peacock, presented by C. Soyza, Esq.

Specimens of the Palmcat, (*Paradoxurus typus*.)

The Indian Genette (*Viverricula Malaccensis*).

• The Flying Fox, (*Pterops Edwardsii*.) and a large river Eel, caught in the Mahawellaganga; presented by A. Whyte, Esq., of Kandy: also a nearly full grown specimen of an Otter, caught on the banks of the Colombo Lake, presented by W. Skeen, Esq.

In antiquities:—two ancient swords dug up on the Leangawella Estate; presented by A. Waddington, Esq., of Hapbootella.

The specimens of birds and mammals are somewhat injured by

time and damp, and are all mounted in the grotesquely distorted manner which characterized the taxidermy of former times. This collection is also not a local one, containing cockatoos, terriers, &c., and it is highly desirable that a fresh one should be formed, strictly confined for the present, to our indigenous Fauna; while the difficulty of preserving mounted specimens proves the desirability of retaining sets of each species of the rarer specimens, in what is called the skin, in which state they are also far more readily available for scientific examination.

The shells of the Society will shortly be arranged on tables under glass, but in the first instance only those that are indisputably native will be so classified; a member has undertaken to name these, and contributions even of the commonest species will be most welcome.

The reptiles can only be considered the commencement of a collection, and as the Society has purchased numerous glass jars for their reception, it is believed they will quickly be increased by donations from members, until they form a complete local collection.

The addition of fresh spirit has greatly improved the appearance of the fishes and reptiles at present received.

Specimens of local minerals are numerous, but much in want of systematic arrangement; those presented by Dr. Gygax are especially interesting.

It is to be wished some members would assist in the formation of collections of coins and insects, in both of which they would probably find many persons willing to aid the Society.

The Library has been enriched by the addition of 87 volumes, Journals and numbers of publications. Of these 40 have been purchases made by order of the Committee, and 47 are donations from the Secretary of State for India, the Government of Ceylon, the University of Christiana, the Royal Philological and Ethnographical Institute for Netherlands India, the Smithsonian Institution of the United States of America, the Royal Asiatic Society, the Bengal and Bombay Branches, the Bombay Geographical Society, and private individuals.

Among the most important of these may be specially mentioned,

Ferguson's valuable illustrated volume on the Tree and Serpent Worship of India, presented by the Secretary of State for India ; and Hunter's Comparative Dictionary of the Non-Aryan Languages of India and High Asia, presented by the Author.

The state of the buildings occupied as the Society's rooms is such as to justify apprehensions as to the safety of the roof, a portion of which is much damaged.

The Treasurer's statement shews a balance of £99 19s. 7d. in hand ; there is however a considerable amount of subscriptions in arrear, which it is exceedingly desirable members should pay in without delay, inasmuch as a large sum will be required for reprinting back numbers of the Society's Journal, some of which are quite out of print, and of others only a few copies still remain on hand. Arrangements for reprinting have already been made, and it is hoped that before the close of another year complete sets will be ready for delivery to all who desire to possess them.

---

On the motion of C. A. Lorenz, Esq., seconded by J. Capper, Esq., the Report was adopted, and ordered to be printed.

The following list of names of gentlemen desirous of membership was then read ; and each having been duly proposed and seconded, they were then ballotted for and elected :—

The Hon. T. B. Stephen, Messrs. H. W. Gillman, C. Dickman, Captain Horace A. Broune, E. Robinson, Dr. Brighthouse, W. C. Brodie, J. B. Curtayne, R. L. M. Brown, C. Tatham, R. H. Morgan, E. Gower, J. W. Venn, H. D. Gabriel, J. Maitland, C. H. Ledward, T. Gill, J. W. Home, A. Whyte, J. Slorach, W. Bryan, Geo. Nicholls, Jas. Brodie, H. D. Andree, A. J. Bell, W. L. H. Skeen, J. Guthrie, C. Brito, A. Campbell, Rev. S. Coles, G. A. L. Bowling, G. Armitage.

It was then resolved, that a Deputation from the Society should wait upon His Excellency the Governor to solicit aid from the Public Funds for the extension of the Society's Rooms, which had

been promised during the administration of Sir Charles MacCarthy : and for the payment of a permanent Secretary.

The Rev. S. Coles then read a paper on Buddhism, containing a summary of, and extracts from the *Tun Pittakas*, which regulates the conduct of the priesthood.

The paper was referred to the Committee on Papers.

*Special General Meeting, March 12, 1870.*

C. P. Layard, Esq., in the Chair.

Messrs. R. Dawson, W. C. Brodie, J. Capper, Keppel Jones, W. Bryan, S. Grenier, Dr. Koch, and W. Skeen.

The Secretary laid upon the Table the first part of the *Journal* for 1866—70 ; and presented the Society with a specimen of the sea-snake *Hydrophis sublævis* of Gray, upwards of six feet long, which had been caught about twelve miles off Colombo.

The following gentlemen were then elected members of the Society :—

Capt. A. B. Fyers, R. E., Lieut. Vincent W. Legge, R. A., Messrs. J. D. Young, W. E. T. Sharpe, Æ. A. King, C. S. Sparkes, and R. Andree.

The Meeting then proceeded to elect Office Bearers for the ensuing year. The following Gentlemen were elected :—

*President.*

CAPT. A. B. FYERS, R. E.,

*Vice-Presidents.*

REV. B. BOAKE, D. D. | C. P. LAYARD, ESQ.

*Committee.*

T. B. STEPHEN, Esq.  
R. DAWSON, Esq.  
REV. J. SCOTT,  
J. ALWIS, Esq.  
J. CAPPER, Esq.

KEPPEL JONES, Esq.  
C. L. M. BROWN, Esq.  
W. SKEEN, Esq.  
W. BRYAN, Esq.  
DR. KOCH.

C. O'HALLORAN, Esq.



**R. V. DUNLOP, Esq.—*Treasurer.***

**LIEUT. VINCENT W. LEGGE, } *Joint Secretaries.***  
**LIONEL F. LEE, Esq. }**

**MUDALIYAR L. DE ZOYZA,—*Librarian.***

It was then resolved, that the Committee be empowered to obtain the services of a competent Taxidermist :

That a vote of thanks be passed to the retiring Office Bearers for their past services; and

That copies of the Journal be sent to the local Presses.

---

**JOURNAL**  
**OF THE**  
**CEYLON BRANCH**  
**OF THE**  
**ROYAL ASIATIC SOCIETY:**

---

**1867—70.**

---

**PART I.**

---

**COLOMBO.**  
**PRINTED BY F. FONSEKA, CHATHAM STREET, FORT.**

---

**1870.**



# CONTENTS.

|                                                                                                                                                                                                                                                                | PAGE.   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| On the Origin of the Sinhalese Language.—By James De Alwis,<br>Esq., M. R. A. S. ... ..                                                                                                                                                                        | 1— 86   |
| A Lecture on Buddhism.—By the Rev. D. J. Gogerly, with Notes<br>by the Rev. David De Silva ... ..                                                                                                                                                              | 87—137  |
| Description of two Birds new to the recorded Fauna of Ceylon.—<br>By H. Nevill, Esq. ... ..                                                                                                                                                                    | 138—140 |
| Description of a new Genus, and five new species of Marine Uni-<br>valves from the Southern Province, Ceylon.—By G. Nevill,<br>C. M. Z. S., and H. Nevill, Hon. Sec. R. A. S. (C. B.), F.<br>Z. S. ... ..                                                      | 141—142 |
| A brief notice of Robert Knox and his companions in captivity<br>in Kandy for the space of twenty years, discovered among<br>the Dutch Records preserved in the Colonial Secretary's<br>Office, Colombo, and translated into English.—By J. R.<br>Blake ... .. | 143—150 |



JOURNAL  
OF  
THE CEYLON BRANCH  
OF THE  
ROYAL ASIATIC SOCIETY.

---

*On the Origin of the Sinhalese Language;*

BY JAMES ALWIS, Esq., M. R. A., S.

---

SECTION SECOND.

IN a previous paper I adverted to a few historical facts in proof of the proposition, that 'the Sinhalese is an affiliated dialect of the Sanskrit, and that it bears no affinity to the Dravidian or South-Indian class of languages.' In the present I purpose to adduce the promised proof: and here I may premise that (1) whether we compare the *phonetic system* of the Sinhalese with that of the Dravidians; or (2) resort to *lexical analogies* of the same languages; or (3) compare their *grammatical relations*; or (4) examine the *syntactical arrangement* of their words, we arrive at but one conclusion, viz., that the Sinhalese is as independent of the Dravidian as the latter is of the Sanskrit.

SOUNDS.

There is some resemblance between a few of the modern Sinhalese and Tamil letters; but this does not lead to any important

result, since both Alphabets are derived from the Deva Nàgarì,\* and since also the peculiarities which distinguish the Sinhalese from the Tamil are such as to render it very probable that each had an independent origin. Before proceeding however to point them out, it may be stated that the Sinhalese alphabet now in current use was not the one employed in the third century, since the earliest unmistakeable record of a royal grant engraved on a rock about A. D. 261, intended to be read by the Sinhalese of after-generations, and therefore written in the Sinhalese language, is in the Deva Nàgarì character.†

To the Telagu, Canarese, and the Tamil, as well as to the Sinhalese, are known a short e and o ; but these have been of comparatively recent introduction into the Sinhalese; for our alphabet itself, like the Deva Nàgarì, does not give any symbols for the long sounds.

The Tamil has no characters corresponding to the ri, lri, au, and ah; nor has it adopted the obscure anusvâra.‡ Though all these are found in the Sinhalese alphabet, yet it is only the last which is necessary to express the Sinhalese, the other letters being used for the purpose of expressing either Pâli or Sanskrit words. Among the Sinhalese vowels there are also two characters not found in the Deva Nàgarì. These are æ and æe. It is true they are not given in our alphabet, which is in every respect identical, as regards sounds, with the Deva Nàgarì; and that they are not found in the Sidatsangarâ. But, whether or not we regard them as modifications of the a and à, it is important to bear in mind that there are in the Sinhalese many hundred words whose initials begin with these sounds, whilst it is impossible to say how frequently they occur as medials, as æ in 'bat' or æ in 'stand'. Now it is very remarkable that, whilst this æ is deficient in all the South-Indian Alphabets, no

\* Caldwell's Drav. Grammar, p. 93 et seq.

† See the Ceylon Almanac for 1834.

‡ 'There is nothing in any of the Dravidian Languages which corresponds to the use of the obscure nasal *Anusvâra* as a final, in Hindi and in the northern vernaculars.'—Caldwell's *Comp. Grammar*. p. 108.

Dravidian organs of speech can pronounce it correctly. We have often been amused in our intercourse with the Tamils by their ludicrous pronunciation of it. If, e. g., a Tamilian wishes to say *ata* 'seed,' he would invariably express it *eta*. So likewise *ati* 'are,' he would express *eti* 'come;' *bāri* 'impossible,' *beri* 'very ripe;' *aka*, 'waist,' *eka* 'one;' etc. etc.

Again, we have the 'half-anusvāra' which is deficient in all the Dravidian languages except the Telugu. It is true that our classical Sinhalese, like the Tamil, is deficient in aspirates; yet it will be observed that the former possesses all the consonants known to the Deva Nāgarī, whilst the latter adopts only the first and last characters of each of the five classes into which the consonants are divided in the *Deva Nāgarī* Alphabet. 'Thus,' as remarked by Caldwell, 'the Tamil Alphabet omits not only all the aspirated consonants,.....but also all its soft and sonant letters,' p. 96. The Tamil, is moreover, deficient in the aspirate 'h' as well as the sibilant 's', both which have an existence in the *Sinhala* as may be perceived in the very name given to our language.

The change of *s* into *h* is, moreover, a peculiarity which is to be found in some Prākṛit dialects,\* as in the Sinhalese.† It exercises such vast influence over those languages in the formation of sounds, that on this ground alone we may determine the independence of the Sinhalese Alphabet, in its origin, of the Tamil.

We may also point out four letters in the Tamil which are as much unknown to the Deva Nāgarī, as to the Sinhalese Alphabet. These are a deep liquid 'r,' another 'r' which is harsh and rough in its sound, a peculiar 'l' with a mixture of r, and an 'n,' between which and the dental 'n' there is no difference except that the former is invariably used as a final.

These differences may be attributed to the high antiquity of the literary cultivation of the Dravidian dialects as compared with the northern. When Wijaya arrived in Lanka, at the latter end of

---

\* See Cowell's *Prākṛit Prakāśa*, p. 121.

† See *Sidatsangarā* cap. i. § 22.



the fifth century before the Christian era, the Dravidians were already acquainted with letters. So were the Sinhalese colonists; for, soon after their settlement in the island, they 'dispatched a letter of invitation.\* But the two nations had no common origin. Their alphabets too are different. It would therefore be reasonable to conclude that the alphabet which the Sinhalese brought down to Ceylon was, what their earliest writings† exhibit, the oldest form of the *Dêva Nâgarî*, similar to the characters of the inscriptions of *Asoka*.

The following comparative table of the Sinhalese and the Tamil Alphabets also proves that the former has not reached the Sanskrit through a Dravidian medium.

## VOWELS.

Sinh. — a, â, i, î, u, û : ri, rî : lri, lî : — e : ai : — o : au : an : aḥ  
 Tamil — a, â : i, î : u, û : — : — : — : e, è : ei : o, ò : au : — : —

## CONSONANTS.

|                         |     |     |     |   |   |    |   |    |
|-------------------------|-----|-----|-----|---|---|----|---|----|
| Gutturals, Sinh.        | ... | k   | kh  | : | g | gh | : | ṅ  |
| Ditto, Tamil            | ... | k   | —   | : | — | —  | : | ṅ  |
| Palatals Sin.           | ... | ch  | chh | : | j | jh | : | ñ  |
| Ditto, Tamil            | ... | ch  | —   | : | — | —  | : | ñ  |
| Cerebrals, Sin.         | ... | t   | th  | : | d | dh | : | ṇ  |
| Ditto, Tamil            | ... | t   | —   | : | — | —  | : | ṇ  |
| Dental Sin.             | ... | t   | th  | : | d | dh | : | n  |
| Ditto, Tamil            | ... | t   | —   | : | — | —  | : | n  |
| Labials, Sin.           | ... | p   | ph  | : | b | bh | : | m  |
| Ditto, Tamil            | ... | p   | —   | : | — | —  | : | m  |
| Semi-vowels, Sin.       | y   | r   | l   | v |   |    |   |    |
| Ditto, Tamil            | y   | r   | l   | v | ṛ | ṛ̣ | Ṛ | Ṛ̣ |
| Sibilants and aspirate, |     |     |     |   |   |    |   |    |
| Sinh.                   | s,  | sh, | s,  | h |   |    |   |    |
| Tamil                   | —   | —   | —   | — |   |    |   |    |

\* Mahawansa p. 53.

† See the Inscriptions at Mihintala.

Though the Sinhalese alphabet contains, as above indicated, the Sanskrit vowels *ri*, *ṛi*, *lri*, *lṛi*, *ai*, and *au*; yet they are unknown to the language itself, thus exhibiting a difference between it and the Tamil, which has *ai* and *au*; and, as the reader is aware, a similarity to the Prākṛit dialects which reject all the above vowels. The changes, too, which Prākṛits effect in the letters of words which are taken from the Sanskrit are exactly the same in the Sinhalese, e. g.

i. The Sanskrit *ri* is changed into *a*, *i*, *u*,\* and *e* in the Sinhalese; and in this respect the latter follows the Prākṛit, of which we shall quote the Pāli.

| <i>Sanskrit.</i> | <i>Pali.</i>  | <i>Sinhalese.</i> |           |
|------------------|---------------|-------------------|-----------|
| <i>driḍha</i>    | <i>dalha</i>  | <i>dala</i>       | ‘coarse’  |
| <i>kṛita</i>     | <i>kaṭa</i>   | <i>kala</i>       | ‘made’    |
| <i>hṛida</i>     | <i>hada</i>   | <i>hada</i>       | ‘heart’   |
| <i>mṛita</i>     | <i>mata</i>   | <i>mala</i>       | ‘dead’    |
| <i>riṣi</i>      | <i>isi</i>    | <i>isi</i>        | ‘a saint’ |
| <i>ṛidhi</i>     | <i>iddhi</i>  | <i>idu</i>        | †         |
| <i>kṛimi</i>     | <i>kimi</i>   | <i>kimi</i>       | ‘worm’    |
| <i>śṛigāla</i>   | <i>sigāla</i> | <i>sival</i>      | ‘jackal’  |
| <i>riju</i>      | <i>uju</i>    | <i>udu</i>        | ‘direct’  |
| <i>mṛidu</i>     | <i>mudu</i>   | <i>mudu</i>       | ‘soft’    |
| <i>vṛikṣa</i>    | <i>rukkha</i> | <i>ruk</i>        | ‘tree’    |
| <i>griha</i>     | <i>geha</i>   | <i>ge</i>         | ‘house.’  |

ii. The use of *lṛi* being not very different from that of *ri*, even in the Sanskrit, I shall pass on to *ai*, which becomes *i* or *e*; thus.

| <i>Sanskrit.</i> | <i>Pali.</i>    | <i>Sinhalese.</i> |              |
|------------------|-----------------|-------------------|--------------|
| <i>aishvarya</i> | <i>issariya</i> | <i>isuru</i>      | ‘prosperity’ |
| <i>Airāvāna</i>  | <i>Erāvāna</i>  | <i>Eravana</i>    | ‘a name’     |
| <i>Kailāsha</i>  | <i>Kelāsa</i>   | <i>Keles</i>      | ‘a name’     |
| <i>taila</i>     | <i>tela</i>     | <i>tel</i>        | ‘oil’        |
| <i>vaira</i>     | <i>vera</i>     | <i>vera</i>       | ‘hatred.’    |

\* See Cowell's *Prākṛit Prakāsa*, p. xviii.

† A word signifying ‘power to go through the air.’

iii. The *au* is changed into *a* (æ) *o* and *u*; thus.

| <i>Sanskrit.</i> | <i>Pali.</i> | <i>Sinhalese.</i> |          |
|------------------|--------------|-------------------|----------|
| nau              | nāvā         | næva              | 'ship'   |
| aushadha         | osada        | osu               | 'drug'   |
| gaura            | gora         | gora              | 'white'  |
| chaura           | chora        | sora              | 'thief'  |
| mauktika         | muttika      | mutu              | 'pearl.' |

Without entering into all the changes which the Sanskrit consonants undergo in the Prākṛits and the Sinhalese, I shall here request attention to a few which may be deduced from the above examples.

iv. It will be seen that the Sanskrit *d* is changed into *l*; as in

| <i>Sanskrit.</i> | <i>Pali.</i> | <i>Sinhalese.</i> |          |
|------------------|--------------|-------------------|----------|
| àsādha           | àsālha       | æsala             | 'July'   |
| driḍha           | dalha        | dala              | 'coarse' |
| dramiḍha         | damila       | demala            | 'Tamil'  |
| praudha          | ———— *       | pavala            | 'bold.'  |

v. The Sanskrit and Pali *t* is also changed into *l* in the Sinhalese, as;

| <i>Sanskrit.</i> | <i>Pali.</i> | <i>Sinhalese.</i> |            |
|------------------|--------------|-------------------|------------|
| kaṭu             | kaṭu         | kulu              | 'pungent'  |
| kūṭa             | kūṭa         | kulu              | 'wild'     |
| kṛīṭa            | kṛīṭa        | kirula            | 'crown'    |
| bhaṭa            | bhaṭa        | bala              | 'soldier.' |

vi. The Sanskrit and Pali *ch* is frequently changed into *s* in the Sinhalese; whilst no effort is spared by Dravidian organs, even where a Sanskrit word with an *s* is adopted by the Tamils, to change the *s* into *ch*, as *Chinkala* for *Sinhala*.

| <i>Sanskrit.</i> | <i>Pali.</i> | <i>Sinhalese.</i> |          |
|------------------|--------------|-------------------|----------|
| chaura           | chora        | sora              | 'thief'  |
| chumba           | chumba       | simba             | 'kiss'   |
| chatur           | chatu        | satara            | 'four'   |
| chakka           | chakka       | saka              | 'wheel.' |

\* I have not met the equivalent of this in the Pāli.

vii. Here I am reminded of a peculiarity which distinguishes the Dravidian from the Sinhalese. It is that whilst the Sinhalese loves to conclude a word with *a*, as in *satara*, the Dravidians lose no pains to get rid of it, by adopting in its stead a *u* or *ei*; e. g. *âru* for *âra*, 'a village'; *avei* for *ava*, 'those,' etc. etc.

viii. The Sinhalese *d* often represents the Sanskrit and Pâli *j*.

| Sanskrit. | Pali. | Sinhalese. |            |
|-----------|-------|------------|------------|
| râjan     | râjâ  | rada       | 'king'     |
| pûjâ      | pûjâ  | puda       | 'offering' |
| majjâ     | majjâ | mada       | 'kernel'   |
| rujâ      | rujâ  | rudâ       | 'pain.'    |

There are many other dialectic changes which unmistakably point out that the Sinhalese has proceeded from the Sanskrit; but I have, I apprehend, already shown enough, without entering largely into questions relating to dialectic interchanges of sounds, euphonic permutation of consonants, the laws of harmonic sequence, etc. etc., to prove that the Sinhalese, whilst it accords with the northern dialects, essentially differs from the Tamil in its phonetic system. In proving this, I believe, I prove also its difference from the other affiliated Dravidian dialects; for their essential unity in all important and minor matters cannot be denied.

### SECTION THIRD.

#### *Lexical Analogies.*

Those who maintain an opinion different from our own, refer to the existence in the Sinhalese, of words of undoubted Dravidian origin. This can no more be denied than the existence in the undisputed Sanskrit dialects of a vast number of Dravidian words. Indeed we admit the fact; and the History of Ceylon gives a sufficient explanation of this; for, we know that the northern provinces of this island have been, from very ancient times, held by Tamilians; and that after the fall of the great Sinha dynasty in Ceylon, the island was governed by Indian princes of undoubted Dravidian origin, between whom and the Sinhalese a warfare had

been previously carried on, commencing from a period so far back as the age of the memorable Dutugemini.\* It is perfectly reasonable, therefore, to expect in the Sinhalese an admixture of Dravidian words, such as *vela* (veil) 'field,' *kappal* 'ship,' *gala* (kallu) 'stone,' *neli* (nâli) 'a measure,' *adangu* 'to contain,' *adukku* 'to pile one over the other,' *paru* to become 'over-ripe,' etc. But, as very justly observed by the author of the *Sidatsangarâ*, this element of local origin and of casual accession (*nipan*), is but one of three elements, the other two being—the pure, and the adulterated Sanskrit or Pâli.†

Many words of the first class, though corresponding with the *Dravidian*, are yet allied to the Sanskrit, as the following; and it is therefore impossible, in many instances, to determine whether they have been borrowed directly from the Tamil, or from the Sanskrit which has also, it is supposed by some, borrowed‡ from the *Dravidian*: e. g. The Sinhalese word *ammâ* 'mother,' which is the same in Tamil, is found in the Sanskrit as well as in some of the Indo-European tongues; *katu* 'pungent,' corresponds with the Telugu '*katu*,' and the Pâli and Sanskrit *katu*; the Tamil *kalei* 'arts,' which is *kalâ* in the Sinhalese, Pâli and Sanskrit, is supposed to be derived from the Tamil *kal* 'to learn;' *kuti* 'house' or 'hut' in the Sinhalese has much resemblance to the Tamil *kudî* or the Canarese *gudi*, and *kuti* in the Pâli and the Sanskrit; *kotuva* (*kôta* Sanskrit) 'fort' resembles the Tamil *kotei*; etc. etc.

\* 'It is undeniable that immigrations from Ceylon to the southern districts of India have occasionally taken place. The *Teers* (properly *Tivar*, 'islanders') and the *Ilavars* 'Singhalese,' (from *Ilam* 'Ceylon; a word which has been corrupted from the Sanskrit *Sinhalam*, or rather from the Pâli *Sihalam*, by the omission of the initial *s*), both of them Travancore Castes, are certainly immigrants from Ceylon; but these and similar immigrants are not to be considered as Singhalese, in the proper sense of the term, but as offshoots from the Tamilian population of the northern part of the island. They were the partial reflux of the tide which peopled the northern and western parts of Ceylon with Tamilians.' *Caldwell's Comp. Grammar*, p. 72.

† See *Sidatsangarâ*, p. 4.

‡ *Caldwell's Comp. Grammar*, p. 440, et seq.

But all the words in the Sinhalese that may be directly traced to the Dravidian, are so few, that if collected, they will not, I am persuaded, shew a larger proportion than one to nine. And, it is very significant that the writer of the *Sidatsangarà* does not, in giving examples of his three classes, mention one single word which is derived from the *Dravidian*.

Though, however, so far as the dictionary goes, it is perhaps generally difficult to determine the relation of a language which is composed of different elements, as, for instance, the English;\* yet, I believe, it may be affirmed that there is no language, like the Sinhalese, which has '*nine-tenths*' of its vocables clearly derived from a Sanskrit source, that may be traced to a *Dravidian* origin. On the other hand, there is no language, in which the Dravidian element is far in excess of the Sanskrit, that may be placed in the northern group. Take, for instance, the Hindustáni, Maráthi, Bengáli, Guzeráti. The Sanskrit or north-Indian element of these idioms is nearly as much in excess of the Dravidian, as in the Tamil, Telagu, Karnátaka, and Maláyálim (the south-Indian languages) the non-Sanskrit or the Dravidian is in excess of the north-Indian or the Sanskrit element.† In proceeding therefore to an examination of lexical analogies, I shall select on the one hand the Tamil, the most cultivated of the south-Indian languages,‡ in which the Sanskrit element is less than in others,§ and from whence the other Dravidian dialects are supposed to have been derived; and, on the other, the Páli, to which, as I shall hereafter show, the Sinhalese mediately, if not directly, owes its origin.

---

\* Professor Max Muller's *Survey of Languages*, p. 7.

† Caldwell's *Comp. Grammar*, p. 29.

‡ 'From the various particulars above mentioned it appears certain, that the Tamil language was of all the Dravidian idioms the earliest cultivated: it also appears highly probable that in the endeavour to ascertain the characteristics of the primitive Dravidian speech, from which the various existing dialects have been derived, most assistance will be furnished by the Tamil'

—Caldwell's *Comp. Grammar*, p. 60.

§ *ib.* p. 33.

Before entering into direct proof, it may be here convenient to notice the lexical analogies of the Dravidian and the Sinhalese, to which Dr. Stevenson of Bombay refers in an article 'on the language of the aboriginal Hindus'.\* If his conjecture be correct, we might, as justly remarked by Caldwell, reasonably expect to find in their vocabularies a few primary Dravidian roots,—such as the words for 'head,' 'hand,' 'foot,' 'eye,' 'ear,' &c.; but we have not been able to discover any reliable analogy in words belonging to this class. But Dr. Stevenson *professes* to give us a comparative list of "forty-one primitive words, all expressive (as he says) of such ideas as men must use in the infancy of society:" let us examine them.

Referring the reader to that list, I shall confine my observations to the Sinhalese and the Tamil, which are put down in the South-ern class. At the outset the reader will observe, that of forty-one words given of the *Hindi*, in order to show their agreement in sound with the words of the Bengáli, Guzaráti, Maráthi, Telagu, Karnátika, Tamil, and Sinhalese, the learned Doctor has signally failed to show the *Sinhalese* for seventeen.

i. Of the remaining twenty four, '*appan*, Tamil,=*appà*, Sinhalese,' appears first. This is not an ancient Sinhalese word; nor does it occur in our books, which give us *piya* and *bap*. But the word which denotes 'father,' it would seem, is the same in nearly all languages. In the Indo-European and the Semetic families the base is a *p* or *b*, the difference being that in the former the word commences with the consonant above given, e. g., *pater*; whilst in the latter, as in the Hebrew *ab*, the vowel *a* is prefixed to that consonant. In this respect the Dravidian follows the Semetic. Whether this vowel is added or not, it is quite clear that the origin of the word is the same, and that the one-ness of language in a few words, as in the instance before us, proves the one-ness of origin.—'the one language and one speech of the whole earth before the dispersion of mankind.'†

---

\* Bombay A. S. Journal for 1842, p. 103.

† See further remarks hereon under the table of names,—*infra*.

ii. *Pápan*, 'holy father,' Tam. = *bapa* 'holy father,' Sinhalese. The Tamil word here given is the abbreviation of *práppan*, [the addition *pra* being the Sanskrit inseparable preposition denoting 'pre-eminence,'] 'one higher than a full father'. The Sinhalese *báppá* means 'uncle,' and not 'holy father;' and it is derived from *bála* 'young,' and *appá*, 'sire.'

iii. *Kudappá*, the Sinhalese word for 'paternal uncle' is compared with the Telugu *kàkkà*, signifying the same. Now, in the primary Dravidian dialect, the Tamil *kàkkà* means 'peddler;' but the Sinhalese *kudappá* has no relation to either the Telugu or the Tamil words, the former being, like *bàppà*, a compound of *kudá*, 'young,' and *appá*, 'sire.'

iv. *Adi*, Tamil, 'foot;' = *adi*, Sinhalese, 'foot.' The correct word for 'foot' in Sinhalese is *pá*; see *infra*. But *adi* is found in the vernacular to signify the 'substratum' of one's feet, or of any other object; and I believe it comes from the Páli particle *adha*, 'underneath.' *Adi* is also used to denote a measure of twelve inches. In this sense it is clearly an imported word like many a word expressive of modern arts, inventions, &c.

v. *Perru*, 'bear a child,' and *petta pillei*, 'own child,' in the Tamil, are compared with *phaddh*, *bad*, 'the belly, the womb,' Sinhalese. I am not aware that *phaddh* is a Sinhalese word; but the word *bada* has no relation whatever to the Tamil words given above.—See list under the head of Names,—*infra*. In reference to the general list of Dr. Stevenson, and particularly as regards the words under this head, Caldwell remarks:—"In many instances Dr. Stevenson's lexical analogies are illusory, and disappear altogether on a little investigation. Thus, he supposes the north-Indian 'pet,' *the belly, the womb*, to be allied to the first word in the Tamil compound 'petta pillei,' *own child*. That word should have been written 'pettra' in English, to accord with the pronunciation of the Tamil word: the Tamil spelling of it, however, is 'perra.' It is the preterit relative participle of *per-u*, 'to bear, to obtain,' signifying *that was borne*. 'Per-u,' *to obtain*, has no connexion with any



word which signifies *the womb*, and its derivative noun 'pēa-u,' means *a thing obtained, a birth, a favour.*"\*

vi. *Kulambu*, 'clay, loom,' *kolu*, 'a plough share' Tamil—are exhibited as showing a resemblance to *kumbur*, 'a paddy field' in the Sinhalese. The relation between the two sets of words is more imaginary than real. The Sinhalese words for 'clay' and 'plough' are quite different, and have no reference whatever to a field. The word *kumbur* is supposed to be derived from the Sanskrit *kumb* 'to cover,' hence *kumbha* in Pāli is 'an amunam in extent,' generally referring to the sowing-extent of a field; and thence we get *kumbura*, Sinhalese, 'a field.' My pandit, however, believes that this is derived from the Pāli *kedāra*.

vii. *Koliyan*, 'a weaver of the Pariah Caste,' *kolairur*, 'huntmen,' in Tamil, are compared with the Sinhalese *kolaya*, 'plunder.' Philologically or historically, there is no relation between these words. The Sinhalese word is clearly derived from the Pāli *kōla-kala*, 'tumult,' with which *plunder* is ever associated in one's mind.

viii. *Torravu*, 'a herd of cows,' *totti*, 'a pound' in Tamil—are set against the Sinhalese *tavalam*, 'a flock or herd.' The Sinhalese never use this word simply to indicate 'a flock;—the sense in which they do use it being to denote cattle employed to convey goods; which, it is remarkable, are placed on either side of the animal's back, so that the two loads may *balance* equally. Now, *taula* in the Sanskrit is 'a balance.'

ix. *Atam* 'across,' *adham* 'enclosing, hiding,' *adam* 'hindrance,' Tamil—are shown as related to the Sinhalese *adaya*, 'prop,' and *adassiya*, 'obstruction;' but *ade* or *adaya* is strictly that which is kept *under* an object in order to prop it up. In this sense it comes from the Pāli *adho*, 'under;' whence *adassi* may be something that obstructs the *assa* (ansa) or 'side' [inside.]

x. *Kurrai*, 'defect,' Tamil;—*koradus*, 'unripe grain,'†—Sinhalese. It is here only necessary to refer the reader to the Sanskrit

\* Caldwell's Comp. Grammar, p. 40.

† It does not mean 'unripe grain;' but is a proper name [in the Sinhalese, as

*koradusha*, from whence we have obtained the Sinhalese word, to show its non-relation to the Tamil *kurrai*.

xi. *Alei*, 'a wave,' Tamil, is said to be allied to *rela*, 'a wave,' in the Sinhalese. The English *ripple* would be nearer *rela* than the Tamil *alei*. But the Sinhalese word comes from the Pāli *tarala*, 'trembling'—'to pass, to go or move.'

xii. *Oduhidam*, 'a recess,' Tamil=*odokkuva*, 'a place in the waist for money,' Sinhalese. This is the only word in the list before us which is derived from the Dravidian. It comes from *odukku* 'to heap,' thence *odokku-va* 'the place [generally the waist] in which something is kept.' This is however a modern introduction, and is not to be found in the books, which use *æka*, from the Pāli *anka*.

xiii. *Opa*, 'smoothness, beauty,' Tamil=*opa*, 'polish, glittering,' Sinhalese. This is clearly a child of the Sanskrit *ojas*, 'light, splendour,' from whence we get *oda*, and thence *opa*.

xiv. *Kā, kāvari*, 'a piece of wood with ropes attached,' Tamil=*kavandan*, 'a bullock's yoke,' Sinhalese. There is some mistake here. Mr. Clough, from whose Dictionary this is said to have been taken, does not give it; and there is no such word in the Sinhalese.

xv. *Korabu*, 'nibbling as a mouse,' Tamil=*kurutu*, Sinhalese, 'a rasp.' What resemblance there is between the nibbling of a mouse and the action of *kurutu* 'scraping,' 'scratching,' [e.g. *apas-kirate* *kuk-kutah* 'the cock furrows;'] I cannot say; but, I believe the words are not related to each other.

xvi. *Tati*, 'skreen,' Tamil=*tatitu*, Sinhalese, 'a ceiling, ship's deck.' This word should be *tattu* (see Clough) from the Pāli *tati* 'top,' between which and a screen there is no relation whatever.

xvii. *Podi*, 'full sacks or bags,' Tamil=*podī*, 'a bale,' Sinhalese. The Sinhalese like the Tamil word, is derived from the Sanskrit and Pāli *puta*, 'concavity.'

---

in the Pāli and Sanskrit, for 'a species of grain eaten by the poor people'—*paspalum scrobiculatum*, Lin.

xviii. *Kannarāli*, 'a melancholy event,' in Tamil, is compared with *kanakal*, 'excellent,' Sinhalese. Clough does not give this; nor is there a word approaching to that sound in the Sinhalese. But, what is the analogy between *excellent* and *melancholy*?

xix. *Mottamuta*, 'total,' Tamil=*monvata*, 'beautiful,' Sinhalese. What coincidence there is between 'total' and 'beautiful,' I cannot perceive; but this I can state—that the Sinhalese word *monvata* comes from *mand*, 'pleasingly,' and *kota*, 'done.\*'

xx. *Kargarapu*, 'a rattling noise like thunder,' Tamil=*kara-dara*, Sinhalese, 'teazing.' The Sinhalese word is deduced by some from the Pāli *khara* with the affix *tara*, changed into *dara*; whilst others trace it directly to the Pāli *kheda*, 'affliction.'

xxi. *Pinru*, 'retreat,' Tamil=*peral*, 'overturn,' Sinhalese. The latter is from *parivattana*, and has no relation to the Tamil word here given.

xxii. *Polip*, 'a brief explanation,' in Tamil=*bola*, 'a familiar term of address,' Sinhalese. Here again we do not perceive the analogy intended to be drawn. *Bola* comes from *bhrutaka*, Sanskrit; *bhataka*, Pāli; *bāla* Sinhalese, 'hireling'; hence *bola* is a term of address for a subject, or a servant.

xxiii. *Muri*, 'to break,' Tamil=*madanvā*, 'to squeeze,' Sinhalese. *Muri* bears no relation to *madina*, which is directly derived from *majjama*, the Pāli word of the same signification.

xxiv. *Apā*, Tamil=*apoi*, Sinhalese, an interjection. Without exclaiming with Yāska, the eminent Hindu philologist, that 'words are fixed in the world, we cannot say how,—*svabhāvatāh* by nature!,' we may refer to the Sanskrit particle *apa* implying 'loss, negation, privation, wrong, bad, unnatural, as the source whence we have obtained *apoi*.

"The only resemblances (says Caldwell) which have been pointed out are those which Dr. Stevenson has traced in a few words remote from ordinary use, and on which, in the absence of analogy in primary roots, and especially in grammatical structure, it is impossible to place any dependence." I may add that, as regards

\* K is changed into v as *dandu-kam*=*dandu-vam*; See Sidatsangarā, p. 17.

the Sinhalese in Dr. Stevenson's list of forty-one words, there are but *three* which have any relation to the Dravidian. They are *appà*, 'father;' *odokkuva*, 'a recess in the waist;' and *adi*, 'a foot of twelve inches.' Thus, the proportion which the Sinhalese bears to the Dravidian is, in the instances selected by the Doctor, less than one to thirteen.

I have occupied more space than was actually necessary to disprove the relationship attempted to be established between the Sinhalese and the Dravidian. It is time to proceed to direct proof of their non-relation.

I purpose to institute my comparisons with reference to what is called by *Abel Remusat*, the 'prerogative instances,' consisting of nearly all the words given in a List issued by 'the Anthropological Society, to be noted and used for the radical affinities of languages, and for easy comparison,'—words which may be classed into (1) numerals; (2) names for days, and (3) months; (4) pronouns; (5) names, and (6) actions expressive of the common wants of mankind; (7) the earliest extant Sinhalese; and (8) words in our authors, usually entitled the *Elu*.

## NUMERALS.

|         | <i>Pali.</i> | <i>Sinhalese.</i> | <i>Tamil.</i> |
|---------|--------------|-------------------|---------------|
| One     | eka          | ekā               | onnu—oru      |
| Two     | dva          | deka              | rendu         |
| Three   | ti           | tuna              | mūnu          |
| Four    | chatu        | satara            | nālu          |
| Five    | pancha       | pasa              | anji          |
| Six     | chcha        | saya              | āru           |
| Seven   | satta        | sata              | ēlu           |
| Eight   | attha        | ata               | ettu          |
| Nine    | nava         | nava              | ombadu        |
| Ten     | dasa         | dasa              | pattu         |
| Twenty  | visati       | vissa             | irivadu       |
| Fifty   | paññāsa      | panasa            | ambadu        |
| Hundred | sata         | siya              | nūru.         |

The above comparisons clearly indicate that the Sinhalese nume-

erals\* stand in fraternal connection with the Pāli and the Sanskrit. There is not one Sinhalese word in the above list which has the least affinity to the Tamil, if we except *ettu*, 'eight.' Its resemblance to the corresponding numeral of the Indo-European family, is indeed very remarkable; and it is generally supposed that the Tamil numeral noun is derived from the Sanskrit *aṣṭa*. But, as properly remarked and proved by Caldwell, 'this resemblance, though so close as to amount almost to identity of sound, is accidental; and disappears on investigation and comparison, like the resemblance between *onno* and *unus*, *anju* and *pancha*.'† Again, it is true that *oka* is used in the Telugu for 'one;' but the resemblance between it and the Sinhalese *eka* is as illusory as that between the English 'one' and the Tamil 'onnu.' It is also true that the Canarese *ondu*, 'one,' and the Malayalam *renda* for 'two,' are occasionally used by the Sinhalese as in *otu* for 'one-tenth' or 'tithes,' and *onda*, 'unit,' *irate*, 'double,' as in playing a Tamil game with chanks; but, as every one conversant with our language fully knows, they are used very seldom, and are not to be met with in our books. "Though *eka* is invariably used for 'one,' yet, says Caldwell, a form has been noticed which appears to be allied to the first numeral of the Western languages,' viz., *ūna-s* 'less,' which is prefixed to some of the higher numerals to express *diminution by one* (e. g.) *ūnavinshati*, 'nineteen,' like the corresponding prefix *un* in the Latin *undeviginti*. ‡ Professor Bopp is also of the same opinion; see his *Comparative Grammar*, i., p. 416. Where such eminent scholars have expressed an opinion, I cannot but approach the subject with great diffidence; but a careful examination forces a strong conviction into my mind, that the *ūna* in the phrase *ūnavinshati* is not allied to the Latin *unus*. This expression for 'nineteen' is nearly the same

---

\* 'The numerals are generally a very safe criterion of an original relationship between languages.' Pr. Max Muller's *Survey of Languages*, p. 13.

† See Dravidian Grammar, p. 279 *et seq.*

‡ *ib.* p. 264.

in the Sinhalese, as *unu vissa*. It is an elliptical phrase; and though it literally means 'less twenty,' or 'incomplete twenty'; yet it conveys *ekena ūna vinshatih* 'twenty less by one,' or, as in *ekona-vinshatih* 'twenty minus one'='nineteen.' The *un* in the Latin word is, as I conceive, a negative prefix like the *na* in the Sanskrit *ekāṇna-vinshatih*, 'by one not twenty.'

This elliptical phraseology, it is curious to observe, is found in different dialects in expressing numerals; e. g. *addhena chatutto*, in the Pāli, is 'four by half'='four (less) by half,'='four (less) by half (of one),' [= 'three and a half,'] *eka* being understood as in the Sanskrit *ūna-vinshatih*, or in the Sinhalese *unu-vissa*. Again *dasa-adā-masa* 'ten months by half'='ten months (less) by half,' or 'ten months (less) by half (of one),' or 'nine months and a half.' This elliptical form, moreover, is the same in the Hindustāni, which has *unu-is* (= *una-bis*), although the Murāthi has *ek-un-isa*, like the Sinhalese form which we sometimes find in our books, *ek-un-isi*. The Tamil *on-badu* is indeed formed like the Hindustāni *una-bis*; but except in the principle of its formation, I perceive no analogy between the two; for whilst *ūna* in the latter expresses 'diminution,' the *on* in the former (*on-patu*, or *on-pattu*) denotes 'one' as in the Roman numeral *ix*=(*i-x*), 'one (less) ten.'

I shall next examine the names for *days* and *months*.

## DAYS.

|           | <i>Pāli.</i> | <i>Sinhalese.</i> | <i>Tamīl.</i>    |
|-----------|--------------|-------------------|------------------|
| Sun-(day) | ravi-(dina)  | iri-(dā)          | nāir-ti-(keleme) |
| Mon.      | soma         | sandu             | tiṅkal           |
| Tues.     | mangala      | angaharu          | sevai            |
| Wednes.   | budha        | badā              | pudan            |
| Thur's    | guru         | brahaspati        | vyāla            |
| Fri.      | shukra       | sikurā            | velli            |
| Satur.    | sevi         | senasura          | seui             |

The above comparisons lead to this, if no other, important result, —that the Sinhalese names are not derived from the Dravidian. But, the principle on which the names were originally formed

in both is the same; for the Dravidians, who had made great strides in civilization\* at the period of our colonization of this island, were doubtless acquainted with the Astronomical causes which led to the names of 'days.' The principle upon which the assignment of the *days* to their respective guardians was made, is indeed well known. The Sinhalese assign the *days* to the same planets as the Hindus and the Tamils, and if there be any difference in the names adopted, the reader will find that whilst one nation uses one word, for instance *ravi*, another uses a synonym for the same, as *iru*, and another, *nair*. The only peculiarity which exists in the formation of the Sinhalese and the Tamil names is, that whilst the former, like the Indo-European, adopt *day* after the particular name of a deity, the latter use another expression, *kila-meï*, 'that which belongs to.' The deities or planets named are Sun, Moon, Mars (red-deity), Mercury, Jupiter, Venus, and Saturn.†

## MONTHS.

|       |    | <i>Pali.</i>             | <i>Sinhala.</i> | <i>Tamil.</i> |
|-------|----|--------------------------|-----------------|---------------|
| Mar.  | 13 | chitta                   | bak             | chittare      |
| April | 12 | vesâkha                  | vesak           | vaikâsi       |
| May   | 13 | jettha                   | poson           | âni           |
| June  | 14 | âsâlha                   | æsala           | ûdi           |
| July  | 15 | { nikkhamanîya<br>sâvana | nikini          | âvannu        |
| Aug.  | 16 | { bhâdra†<br>photthapâda | binara          | perettâsi     |
| Sept. | 16 | assayuja                 | vap             | atpasi        |
| Oct.  | 16 | kattika                  | il              | kârtige       |
| Nov.  | 15 | mâgasira                 | undu-vap        | markâli       |

\* See Caldwell's Dravidian Grammar, p. 54 *et seq.*

† There is another peculiarity which distinguishes the mode in which the Tamils calculate the day from that in which the Sinhalese compute it; for the former reckon from mid-day to mid-day, and the latter from sun-rise to sun-rise, which is also the mode of computation in the Pali books.

‡ I have here, as elsewhere, introduced the Sanskrit form to show its relation to the Sinhalese.

|      |      | <i>Pāli.</i> | <i>Sinhala.</i> | <i>Tamil.</i> |
|------|------|--------------|-----------------|---------------|
| Dec. | 15   | phussa       | durutu          | tāi           |
| Jan. | 13   | māgha        | navam           | māsi          |
| Feb. | 11 * | phaggunā     | mādin-dina      | pangini       |

The Dravidian names of the *months* are derived, like the Pāli, from the names of the asterisms; and though the Sinhalese adopt some of them, e. g. *vesak*, *æsala*, etc., yet it is very remarkable that they have for others, names which have no relation whatever to the Dravidian, and which owe their origin to local and other causes; e. g., *Mādin-dina* denotes the month in which the sun enters the 'central meridian line'—*madhya-rekhā*,—"the line, which, passing above Lankā and Ujjayani, and touching the region of Kurukshetra, etc., goes through Meru."† *Navam*, from *nava* 'new,' refers to the *new-ness* of the vegetable kingdom, which is exhibited at this period, and means 'the spring,' when all nature is clothed with verdure. *Du-rutu*, from *du* ins. prep. and *ritu* 'season,' denotes the *inclement season* when the natives require the use of fire and firewood to keep themselves warm. *Undu-vap* appears to be the period when a kind of small grain called *undu* was (*vap*) 'sown.' *Il* denotes the month in which the moon is full, nearly in the longitude of *il-valā*, the stars in the head of the Antelope.‡ *Vap* indicates an *ad-interim* season for sowing. *Binara* comes from the Sanskrit *bhādra*; and *nikini* from *nikkhamaniya*, Pāli, with reference to a custom of religious seclusion observed at this period. *Æsala* is from *āsālha*, Pāli. *Fos-on* 'flower-less' is the period when flowers go out of season. *Vesak* is from the Pāli *vesākha*; and *Bak* indicates the month in which there is a 'break' in the computation of the year, though my Pandit intimates the probability of its being expressive of (*bakha* 'great' =) the chief, or first month.

---

\* i. e. 'from Feb. 11th to March 12th.'

† See *Sūrya Siddhanta*, by the Rev. E. Burgess, p. 185.

‡ *ib.*, p. 466.



## PRONOUNS.

|              | <i>Pali.</i>    | <i>Sinhalese.</i>   | <i>Tamil.</i> |
|--------------|-----------------|---------------------|---------------|
| I            | { amha<br>ahan  | ma<br>ma(ma) (nom.) | nàn           |
| We           | mayan           | api                 | nām           |
| Thou         | { tumha<br>tvan | { ta<br>to          | nî            |
| You          | tumhe           | tepi                | nîr           |
| My           | mama            | mage                | en            |
| Thy          | tava            | tage                | nin           |
| He (prox.)   | eso             | mohu                | ivan          |
| He (remo.)   | so              | ohu                 | avan          |
| They (prox.) | ete             | movhu               | ivar          |
| They (remo.) | tē              | ovhu                | avar          |

The personal pronouns serve more to establish or disprove the relationship of languages than any other words\* of a language.

Now, on comparing the above there is not one Dravidian form which has the most distant relation to the Sinhalese, whilst it is quite evident that most of the latter bear the nearest affinity to the Sanskrit, or the Pāli.

The Sinhalese radical *ma*, which is *mama* in the nominative, is clearly taken from one of the Pāli oblique cases of *ahan*, and exercises a great influence in the inflexions of the verb of the first person. In the formation of the plural the vernacular Tamil changes the *na* and the *nî* to *nā(n)-gal* and *nî(n)gal*; and it will be shewn hereafter that this addition of *gal* bears no resemblance whatever to the *pi* which the Sinhalese adopts, nor is that plural inflexion to be found in the formation of any of the Sinhalese plural nouns. But this inquiry properly belongs to another head of our investigations, viz., the *Grammatical*; see *infra*.

---

\* 'The very last words which we should think of borrowing from a foreign nation are *pronouns*, particles, and numerals'—Professor Max Müller's *Survey of Languages*, p. 12.

## NAMES

[ *Expressive of the common wants of Mankind.* ]

|         | <i>Pali.</i>              | <i>Sinhalese.</i>       | <i>Tamil.</i> |
|---------|---------------------------|-------------------------|---------------|
| Hand    | hattha                    | ata                     | kài           |
| Foot    | pàda                      | { paya<br>kakula        | kâl           |
| Nose    | nàsà                      | nàsa                    | mûkku         |
| Eye     | achchi                    | æsa                     | kan           |
| Mouth   | vatta                     | { vata<br>kata          | vâi           |
| Tooth   | { danta<br>data Sans.     | data                    | pallu         |
| Ear     | kanna                     | kana                    | kâtu          |
| Hair    | kesa                      | kes                     | mair          |
| Head    | sîsa                      | { sîsa=hîsa<br>olu      | talei         |
| Tongue  | jivha                     | diva                    | nâkku         |
| Belly   | kuchchhi                  | { kusa<br>bada          | vayaru        |
| Back    | pitthi                    | pita                    | mudugu        |
| Iron    | aya                       | ya-kada                 | irunpu        |
| Gold    | { suvanna<br>suvarna San. | { ruvan<br>ran          | pon           |
| Silver  | rajata                    | ridi                    | velli         |
| Father  | pità                      | { piya<br>appa          | appan         |
| Mother  | ammà                      | { amma<br>mavu          | tâi           |
| Brother | sahòdara                  | { sahodara<br>sohoyuru  | sahodaran     |
| Sister  | sahodarì                  | sahodarì                | tangachchi    |
| Man     | manussa                   | minis                   | maniden       |
| Woman   | { strì san.<br>itthi      | { itiri<br>strì<br>gæni | manidi        |

|            | <i>Pali.</i>        | <i>Sinhalese.</i>      | <i>Tamil.</i>         |
|------------|---------------------|------------------------|-----------------------|
| Wife       | bhariyà             | { bæri<br>ambu         | pañchàdi              |
| Child      | apachcha            | daru                   | pullei                |
| Son        | pùtta               | putà                   | magan                 |
| Daughter   | dhìtu               | dû                     | magal                 |
| Slave      | dàsa                | { dāsa<br>vahal        | adīmei                |
| Cultivator | gahapati            | goyi                   | { ulunan<br>kamakāran |
| Field      | khetta              | { keta<br>kumbura      | vail                  |
| Tank       | vāpi                | veva                   | kulam                 |
| Plough     | nangala             | nagula                 | kelappei              |
| Cow        | { go                | gon                    | pasu                  |
| Cattle     |                     |                        |                       |
| Yoke       | yonga               | yuga                   | nukam                 |
| Shepherd   | gòpàla              | { gopolla<br>enderà    | idayan                |
| God        | deva                | devi                   | kadavul               |
| Devil      | yakkha              | yakà                   | pe                    |
| Sun        | sura                | hira                   | suriyan               |
| Moon       | { chandra<br>chanda | { chandra<br>handa     | tinkal                |
| Star       | tàrà                | tàru-kà                | nakshettra            |
| fire       | aggini              | gini                   | neruppu               |
| Water      | vàri                | vatura                 | nîr                   |
| House      | geha                | ge                     | vûdu                  |
| Horse      | assa                | assa                   | kudirei               |
| Dog        | basaka              | balu                   | nài                   |
| Cat        | bilàla              | balalà                 | pûnei                 |
| Cock       | kukkuta             | { kukulà<br>sevul      | seval                 |
| Duck       | hasa                | { hansa<br>tārà        | târâ                  |
| Ass        | khara               | { kōzōluvā<br>kaludævā | kaludei               |

|             | <i>Pali.</i>      | <i>Sinhalese.</i>          | <i>Tamil.</i> |
|-------------|-------------------|----------------------------|---------------|
| Camel       | ottha             | ota                        | ottakam       |
| Bird        | pakkhi            | { paksi<br>kurulu          | kurivi        |
| Up          | uddhan            | uda                        | mèle          |
| Near        | { samipa<br>lagga | { samipa<br>langa<br>kittu | kitta         |
| Down        | hetthà            | yata                       | kîlei         |
| Before      | puralo            | peratu                     | munnei        |
| Far         | dûra              | dura                       | tûra          |
| Behind      | pacchâ            | pasu                       | pinnei        |
| Who         | { ko<br>katara    | { kavuda<br>kavuru         | âr            |
| What        | kim               | { kim<br>mokada            | enna          |
| Why         | kasmâ             | æyi                        | ên            |
| And or with | saha              | { saha<br>tavada           | um-affix.     |
| But         | kintu             | { yali<br>ehet             | ânâl          |
| If          | yadi              | { nam<br>idin              | âl-affix      |
| Yes         | âma               | ovu                        | ôn, âmâ       |
| No          | na-no             | na-ne                      | illei         |
| Alas        | aho               | aho!                       | ah!           |

Here are sixty four words,—not remote from ordinary use, but expressive of the common wants of man, both in a savage and a civilized state. On examining the Pâli words, it will be noticed, there is scarcely a single word which does not claim relationship with the Sanskrit. If we examine the above Pâli words with their equivalents in the Sinhalese, especially as we find them in the books, we shall find the latter, with one exception, to be allied to the former. That exception is *kotalu*, ‘ass.’ But this is clearly a native word not derived from the Tamil, for the simple reason that in our modern usage we have *kaludæva*, which is from a Tamil

source, although the Tamil word itself is derived from the Sanskrit *khara*. Again on comparing the Sinhalese with the Tamil, we do not find a single Tamil word that has any relation to the *ancient* Sinhalese words of the same signification. But whilst we thus have for every Tamil word, its Sinhalese equivalent clearly allied to the Pâli and unconnected with the Tamil, it will be observed that there are a few Sinhalese synonymes which have some resemblance to the Tamil. These secondary formations are nine in number, and are the following, which I shall examine separately.

i. The Sinhalese word *kakula* is supposed to have come from the Tamil *kal*, 'foot.' Not finding it in our books, I am inclined to treat it as a Tamil derivative; but it is very remarkable that *kakula*, deflected from its original signification of *kâl*, is used to express—not the 'foot,' but, the 'leg.'

ii. There is some distant resemblance between *olu* and *talei*, 'head'; but it is purely a native word, and does not bear any relation to the Tamil. See *Sidatsançarâ*, § 22.

iii. Some believe that our Sinhalese *bada* comes from the Tamil *vayaru*, 'belly.' This is a mistake. The resemblance between these two words is not greater than that between *bada*, and the English *belly* or *body*; indeed it is reasonable to believe that it comes from the Pali *bondi*, 'body;' although a friend suggests that *bada*, as a name for the largest part of the body, may be from the North-Indian *bada*, 'great.'

iv. *Appâ*, Sinhalese=*appen*, Tamil, 'father.' I have already noticed this word, *ante* p. 10. I may here add that its use is confined to the colloquial language.

v. *Scvul*, Sinhalese=*Savel*, Tamil, 'cock.' This is clearly from the Tamil. So far as my observation goes, it has been introduced into our language within the last four hundred years.

vi. *Târa* 'duck' is a modern introduction from the Tamil into the colloquial speech of the Sinhalese. Neither Sanskrit nor Sinhalese writers have ever drawn a distinction between the *Swan* and the domestic *goose* or *duck*. The word used by both for all

these is *hansa*. The very English words 'duck' and 'goose' come from the Vedic *hak-gūsa*=*hansa*.

vii. The Tamil *kaludei* 'ass,' which is evidently allied to the Sanskrit *khara*, has produced our Sinhalese *kaludavā*. But the original Sinhalese word *kota-lu* is independent of the Tamil.

viii. The Sinhalese word for 'bird' is *paksi*; but in colloquial usage we meet with *kurulu*, so near the Tamil *kuruvi*. It is not a generic term for *bird*, but a word for a species of small birds. See my *Contributions to Oriental Literature*, i. p. 44.

ix. There is some resemblance between the Sinhalese *kittu* and the Tamil *kitta*, 'near.' In the Sanskrit, Pāli, and some of the North-Indian vernaculars the word for 'near' is *nikata*. This word the Sinhalese have adopted for the 'chin,' and have therefore altered the same word into *kittu* to denote 'nearness.' It may be thence inferred that both the Tamil and the Sinhalese words are derived from the Sanskrit.

Thus, in three out of the above nine words, the lexical analogies disappear on a little examination; and we have only six out of sixty-four words, or less than one-tenth of the words in the above list, which are related to the Dravidian. Yet, it is very remarkable that those six words are not what we find in the books, but what may be termed a secondary formation confined to the colloquial speech of the Sinhalese. It would thence appear that, if we dispense with all the Sinhalese words which we may trace to a Dravidian origin, we may still express ourselves on all matters with the aid of other Sinhalese words which are undoubtedly of Sanskrit origin; or, in other words, that the Sinhalese may flourish without the aid of the Dravidian.

Though generally, as I have already remarked, the terminology of our classical authors is free from the Dravidian; yet, it is of some historical interest to notice here an exception. It is the Sinhalese version of the *Punsiapanas Jātaka*, in which we find such words as the following, and which it is impossible to understand now-a-days but for the Pāli work of which it is a translation; *kollu* and

*kanan* 'a species of gram, the *glycine villosa*;' *talakkattuwa* 'head-building' for 'the top of an edifice;' *nadaya* 'up-stair;' *pambattiya* 'snake charmer;' *parakku* 'sheet or coverlet;' *pulimukham* 'tiger-face;' *agampadi* 'body-guard, retinue,' etc., etc. The presence, however, of this foreign element in this particular Sinhalese book may be traced to the foreign Dravidian agency which was at work in the translation of the Jâtakas. The *Mahavamsa* says:—

Athâ pi Chola-desiyan nânâ bhâsâ visâradan  
 Takkâgama dharan ekan mahâ-theran Susaṁṣitan  
 Râjâ râja gurutthâne thapetvâ tassa santike  
 Jâtakâni cha sabbâni sutvâ sutvâ nirantaran  
 Ugganhitvâ tad'atthampi dhâretvâ tadanantaran  
 Tâni sabbâni paññâsâ 'dhike panchasate subhe  
 Jâtake Pâli bhâsâto Sihâlâya niruttiiyâ  
 Kamato parivattetvâ pitakattaya dhârinan  
 Mahâ therâna' majjhamhi sâvetvâ parisodhiya  
 Lankâyan pana sabbattha lekhâpetva pavattayî.  
 Jâtakâni pune tâni nija sissappaveniyâ  
 Pâlayitvâ pavattetun ârâdhetvâna dhîmato.  
 Medhankarâbhi dhanassa therassa tassa dâpayi—  
 Tasseva saka nâmena parivenan cha kâriya  
 Purâna gâman Sannîra selan Labuja mandakan  
 Moravankan'ti me gâme chaturôva sadâpayî.

'Afterwards, the king [Parâkkrama] appointed a royal Teacher (in the person of) a very humane Mahâ-thera of the country of *Chola* (Tanjore), accomplished in different languages and in Logic and religion; and having continually heard and studied under him all the Jâtakas; and, having (moreover) committed to memory their significations, (he) thence gradually translated all the five hundred and fifty Jâtakas from the Pâli into the Sinhalese language, and having thoroughly revised them, after reading the same to an (assembly of) venerable priests who had mastered the three Pitakas, caused them to be written, and published them throughout *Lankâ*. He next entrusted those Jâtakas to a learned priest named Me-

dhankara, requesting him to have the same perpetuated without injury amongst the successive generations of his pupils. Having also established in his own name, a collegiate Temple, [he] bestowed the (following) four villages, *Puranagaman* [Paranagama] *Sannira sela* [Tembili-hela] *Labuja-manda* [Del-mada] and *Moravanka* [Moravaka].'

## VERBS

[*Expressive of the actions of every-day life.*]

|       | <i>Pali</i>       | <i>Sinhalese.</i> | <i>Tamil.</i>   |
|-------|-------------------|-------------------|-----------------|
| Be    | bhû               | vu                | iru             |
| Go    | yâ                | { ya<br>pala      | po              |
| Come  | e                 | { en<br>vara      | va              |
| Eat   | khâda             | ka                | tin             |
| Sit   | ni-sîda           | indha             | iru             |
| Beat  | ghansa            | gaha              | adi             |
| Stand | thâ-(sthâ)        | hiti              | nil             |
| Die   | mara              | mara              | sâ              |
| Give  | dâ                | dâ                | ta              |
| Run   | dhâva             | duva              | ôdu             |
| Shoot | vidha             | vidi              | sudu            |
| Sleep | niddâ             | nidi              | padu            |
| Cook  | pacha             | piha              | { samei<br>âkku |
| Drink | pa-(pibana)       | bo (bona)         | kudi            |
| Fall  | pata              | veta              | vilu            |
| Chew  | chabba            | vika (vi & ka)    | chappu          |
| Break | khadi             | kada              | odi             |
| Play  | kila              | keli              | âdu             |
| Cut   | { klipa*<br>chida | kapa<br>sinda     | vetta           |

\* From *kripa* comes the past participle *klipta*—Sanskrit.



|        | <i>Pali.</i>       | <i>Sinhalese.</i> | <i>Tamil.</i>   |
|--------|--------------------|-------------------|-----------------|
| Know   | { nâ<br>jânâti     | dana              | ari             |
| Walk   | âhinda             | sevida            | nada            |
| Plough | ka-sa              | hâ                | ulu             |
| See    | { disa<br>dakkhati | daka              | kân             |
| Keep   | { thâ<br>thapa     | taba              | vai             |
| Make   | sâda               | sada              | { panna<br>âkku |
| Bind   | badha              | banda             | kattu           |
| Bite   | dasa               | vika              | kadî            |
| Write  | likha              | liya              | eladu           |
| Turn   | parivatta          | perala            | tiru-pu         |
| Fill   | pûra               | purava            | nirappu         |

Nearly every Sinhalese word is in the above list of thirty verbs allied to the Pali or the Sanskrit; and there are only two secondary forms, as in the names, which have some resemblance to the Tamil. They are *pala* 'go' and *vara* 'come.' Now, *pala* is not used in any of the variations of the verb, except in the second person imperative; and does not, like all other verbs, come from any radical which denotes *motion*, or from which the other moods and tenses are formed. The radical for 'go' in the Sinhalese is *ya*, from which we obtain *yami* 'I go;' *giyemi* 'I went;' *yannemi* 'I shall go,' etc., with slight modifications in the other persons. So likewise *va-ra* 'come thou' is a form for the second person. It does not come from the root *e*, which alone enters into all the variations of tense and person, as *emi* 'I come;' *â(v)emi* 'I came;' *e nnemi* 'I shall come.' The regular imperative forms of *ya* and *e* are also the following:—*yan*, *yanne* 'go thou;' *en*, *enne* 'come thou;' *yavu* 'go ye;' *evu* 'come ye.'

Whence then do we get these stray forms of *pala* and *vara* which we use to persons who are addressed with the offensive pronoun *to*? *Pala* is nearer the Pali *paleti* 'he goes' than the Tamil

*po*; but *vara* is supposed to be from the Tamil. We thus have but one stray Dravidian form in the thirty verbs in the above list.

Having given the Sinhalese *names* and *verbs* in common use at the present day; I now proceed to examine the earliest extant Sinhalese, of which I have presented a specimen in the *Sidat-Sangara*, p. xxxvi; and these words, be it remembered, being found on a rock inscription (of 262 A. D.), are unadulterated by the errors of transcription.\*

|                       | <i>Pali.</i> | <i>Sinhala.</i> | <i>Tamil.</i> |
|-----------------------|--------------|-----------------|---------------|
| Prosperity            | siri         | siri            | tiru          |
| Weight                | bhàra        | bara            | param         |
| <i>Kshetriya</i>      | khattiya     | ket             | chattriya]    |
| Family                | kula         | kula            | kulam         |
| Pinnacle              | kunta        | kot             | thuvi         |
| <i>Xshwaku</i>        | okkàka       | okà-vas         | suvaku        |
| King                  | ràja         | raja            | rasa          |
| Succession            | paramparà    | parapura        | parampara     |
| Descend               | bhassa       | bata            | rangu         |
| Illustrious           | vasabha      | usabi           | prastava-mana |
| 'Name'                | Mèghavanna   | Mevan           | -----         |
| Great                 | mahanta      | maha            | magha         |
| That                  | ta           | èt              | anda = â      |
| Equal                 | sama         | sama            | sama          |
| Lineage               | jàti         | jæyi            | jâdi          |
| Anointed queen        | abhisekâ     | bisò            | { rasati      |
| <i>Regina</i> , queen | ràjanì       | ræjana          |               |
| Womb                  | kuchohhi     | kusa            | kerpam        |
| Born                  | upajja       | ipada           | upavital      |
| First                 | âdi-pâda     | æpà             | modal         |
| Enjoyed               | vinda        | vinda           | anubavitta †  |
| Due-course            | pati-pâsi    | pilivela        | kiramam       |

\* In the above table I have given the root of every word omitting only the inflections, names and repetitions.

† This comes from the Bangali *e-mota*.

|                             | <i>Pali.</i> | <i>Sinhala.</i> | <i>Tamil.</i> |
|-----------------------------|--------------|-----------------|---------------|
| Self                        | âtuma        | tumà            | tân           |
| Island                      | dîpa         | divu            | tivu          |
| Pleasing                    | pasâda       | pahaya          | impamaneî     |
| Stand                       | thà          | sita            | nitta         |
| State Canopy                | chatta       | sat             | vidânam       |
| Raised                      | langa        | laga            | uyartnâ       |
| Sixteenth                   | sòlasi       | solos           | padinâran     |
| Year                        | sarada       | havurudu        | varusam       |
| <i>name of a month</i> ———— |              | vap             | ————          |
| Moon                        | chanda       | sanda           | tingul        |
| Full                        | punna        | pun             | pûrana        |
| Month                       | mâsa         | mas             | madam         |
| Tenth                       | dasa         | dasa            | pattâm        |
| Part                        | pakkha       | pak             | pangu         |
| Day                         | divasa       | davas           | nâl           |
| Temple                      | vihâra       | veher           | alayem        |
| And                         | saha         | isà             | um            |
| Dwelling                    | vasanta      | vasana          | vasam         |
| Beggar                      | bhikkhu      | bik             | pichcha-kâran |
| Association                 | sangha       | sanga           | sangam        |
| Lord                        | sâmi         | himi            | svâmi         |
| Gatherings                  | senâ         | sen             | kùttam        |
| To do                       | kara         | kara            | sey           |
| Brother                     | bhâtu        | bæ              | sahodaran     |
| Before                      | purâ         | pera            | mun           |
| Kept                        | thaphita     | tubu            | vaitta        |
| Custom                      | châritta     | sirit           | valame        |
| Own                         | nija         | nija            | sonda         |
| Desiring                    | ruchi        | rus             | viruppam      |
| Taking                      | gaha         | gena            | eduttal       |
| This                        | ima          | mè              | idu           |
| Is worth                    | vattati      | vafî            | poram         |
| Proper                      | nichchhati   | nisi            | sari          |

|                 | <i>Pali.</i> | <i>Sinhala.</i> | <i>Tamil.</i> |
|-----------------|--------------|-----------------|---------------|
| With and        | sahá         | hà              | um            |
| Assimilate      | sansanda     | sasadae         | oppâkku       |
| Labourer        | kammi        | kemi            | priyâsi       |
| Slave           | dâsa         | das             | adime         |
| <i>An affix</i> | yutta        | yutu            | ————          |
| Receive         | labha        | laba            | vângu         |
| Give            | dâ           | dâ              | kodu          |
| Explain         | viyâkarana   | vivaruna*       | vilakku       |
| One             | eka          | ek              | oru           |

In the above list which contains sixty-four words, fifty seven, or *nine-tenths* are clearly deduced from the *Pali*; and of the seven words, for which I find no direct equivalents in the latter tongue, it may be remarked, five are allied to the *Pali*, that is to say; *e* 'that' may be from *eta* 'this;' *biso* 'anointed queen' is from *Abhiseka* the name of the ceremony of regal anointment; *vap* is clearly derived from the *Pali* *vapa* 'to sow,' and thence used for 'Sep-Oct,' a period of cultivation amongst the Sinhalese; *nisi*, which here bears the secondary meaning of 'proper,' probably comes from the *Pâli* *nichcha* 'sure,' 'certain,' 'with judgment'—thence 'proper' in the Sinhalese; and *vivara* is most likely derived from the *Pâli* *vohâra* 'custom' or 'rules of justice'—thence *vohârika* 'a magistrate.' Of the remaining two words, one (*yutu*) is a native *affix*, and the other (*isâ*) a native *particle*.

A comparison of the language of the original rock Inscription, with that of the modern version (both which I have given in my *Sidath-Sangarâ*, p. xxxvi) also establishes the fact, which has been noticed by philologers in reference to *Prâkrit* dialects, viz., that 'two-fold forms of the same Sanskrit words are found'\* in the Sinhalese—one more Sanskrit, the other more *Pali*—the latter being decidedly anterior to the former. The Rev. B. Clough has given both these forms in his *Sinhalese Dictionary*, sometimes omitting

---

\* Professor Lassen's *Inst. Prâkriticæ*. See Introduction p. vi.

one, and sometimes the other; and this has led many Oriental scholars, and amongst them Professor Spiegel in his *Kammavâkya*, to the error of believing that 'a multitude of words have been transferred from Sanskrit, and not Pali, into the Sinhalese.' Under this belief he has given two instances; and he is in error as to both. For, *kâna*\* 'ear' is the Sinhalese for the Pali *kanna*, and not *karna*, Sanskrit—and *vaira* is the modern form of the ancient Sinhalese *vera*,† so much nearer the Pali than the Sanskrit form of the word for 'enmity.' The use of the *visarga*, which has nearly disappeared from the Pali, is indeed quite unknown in the Sinhalese; and in the latter language the word 'pain' is not *duksha* but *duh* from the Pali *dukkha*. Such speculations as those to which Professor Spiegel refers, and which I give in the note below,‡ has made him say—"Propius adhuc Elu ad linguam Sanscritam accedere, quin etiam originem ex ea ducere fertur, quod tamen addubitamus, ipsius Cloughi verbis innisi, quia Raskius, linguam Singhalensem numero dikkhani carum esse adscribendam, certissimis probavit testimoniis."—*Kammavâkya* pp. vi. vii.

All my observations in this chapter will serve as a running commentary on the above remarks; and the question as to the Sinhalese being one of the *Dekkhanses*, or of the Malay-Polynesian group of languages, is also disproved by the positive proof of the near relationship which I have throughout exhibited between the Sinhalese and the Pali.

On comparing, moreover, the Tamil words in the above list, consisting of 64 words, (of which we shall for obvious reasons exclude two, *Meghavanna* and *yutta*) with the Sinhalese, it is quite clear that the relation which the 28 italicised Tamil words

---

\* See *Namavaliya*, p. 44.

† *ib.*, p. 18.

‡ 'Eloos has undoubtedly given birth to the vernacular language of this Country. It appears to claim great antiquity, and being derived from Sanskrit, a great portion of her may be traced from that source.' *Clough's Sinhalese Dictionary*, p. ii.

bear to the Sinhalese is not direct, that they are derived from the Sanskrit, sometimes from the same word from which the Sinhalese is derived, and sometimes from another Sanskrit word of the same signification, e. g. *anubavitta*; and that of the remaining 29 words not a single one, so far as I can speak on the subject, has any relation to the Sinhalese, whilst every one of the 64 Sinhalese words with the exception of *e*, (*epâ* and *vap*) is directly derived from the Pâli. So that the result is 'that the Sinhalese, as it is spoken at the present day, and still more strikingly as it exists as a written language' in the uncorrupted tablets of rocks in this island, presents 'unequivocal proof' of its independence of the Dravidian, and of its affinity with Sanskrit dialects.

Lastly, on a careful comparison of the old Sinhalese (which is usually denominated the *Elu*) with the Pâli and the Tamil, nearly every word of the first is found to be derived from the *Pali*, and not the Dravidian. Let us take, for instance, the first thirty words in the alphabetical Index of the Revd. C. Alwis' version of the *Nâmdâvaliya*, avoiding proper names and different forms of the same words, and compare them with the Pali and Tamil words of the same significations.

|           | <i>Pali</i>  | <i>Sinhalese.</i> | <i>Tamil.</i>                     |
|-----------|--------------|-------------------|-----------------------------------|
| Eye       | akkha        | ak                | kan                               |
| Lightning | asani        | akana             | min                               |
| Canopy    | âkâsa vitâna | akasana           | met-kattî                         |
| Letter    | akkhara      | akura             | { <i>Akkara</i><br><i>Elattu</i>  |
| Goad      | ankusa       | akussa            | { <i>ankusa</i><br><i>turattî</i> |
| Demerit   | akusala      | akusala           | <i>pâvam</i>                      |
| Anger     | akkôsa       | akos              | kovam                             |
| End       | agga         | aga               | mudivu                            |
| Depth     | agadha       | agada             | âlam                              |
| Value     | aggha        | agaya             | perumati                          |
| Unction   | angarâga     | agarâ             | <i>abishekam</i>                  |

|                   | <i>Pali.</i>     | <i>Sinhalese.</i> | <i>Tamil.</i>                    |
|-------------------|------------------|-------------------|----------------------------------|
| Ditch             | agādha           | agala             | akal                             |
| Longwood          | { agaru<br>akalu | agil              | akil                             |
| Body              | anga             | anga              | { <i>angam</i><br><i>scriram</i> |
| Woman             | anganā           | angana            | manasī                           |
| Market assembly   | angāne           | angani            | <i>ankādi</i>                    |
| Mars              | angāra           | angaharu          | Sevei                            |
| A creeper         | ankola           | anguna            | kurinji                          |
| Ring              | anguliyaka       | anguva            | modiran                          |
| Ram               | aja              | aja               | ādu                              |
| Eight             | attha            | ata               | ettu                             |
| Eight tastes      | attha-rasa       | ata-rasa          | <i>ashta-rasa</i>                |
| Tower             | attāla           | atalla            | <i>attāla</i>                    |
| Joy               | pīti             | atī               | avā                              |
| Half              | addha            | ada               | pādi                             |
| Forest            | atavi            | adavi             | kādu                             |
| Less              | addha            | adu               | korenda                          |
| Body, (member of) | atta             | at                | angam                            |
| Branch            | sākhā            | atta              | kombu                            |
| Hand              | hattha           | ata               | kāi                              |

. From the above comparisons, it would seem that out of thirty words there are but *four* which do not bear a close resemblance to the Pāli. They are *agādha*, *ankola*, *pīti* and *sākhā*. Now *agādha* means 'exceedingly deep,' and from it comes our *agala* 'ditch.' The resemblance between *Anguna* and *ankola* ('*Alangium hexapetalum*') is apparent; since the substitution of *n* for *l* is frequent in the Sinhalese, and also the interchange of *k* and *g*. Thus *lalāta* becomes *nalāta* 'forehead;' *velando* is sometimes expressed *venado* 'merchants;' and the *l* in *el-biju* 'cardamum' is sometimes changed into *n*, as in *en-sal*, 'sāl' being another word for 'biju.' *Pīti* may or may not be the source from whence we get *atī*; and though *atta* does not come from *sākhā*, yet it is clear that the former

comes from *hatta* in the sense of an 'arm' of a tree. Even if we except the first and the two last of these four words, the result of the comparison is that in the above list but one Tamil word (*akal*) bears a relation to the Sinhalese, and that more than *nine-tenths*\* of the words in the Sinhalese, especially 'as it exists as a written language in the literature of this island,' is traceable to a Pali origin, exhibiting evidence, in some important particulars, that the corruption of the Pali into the Sinhalese has arisen from that natural process of change which we see exemplified in Europe in the corruption of the Latia into the Italian and the French.

A careful inter-comparison of Indian dialects with one another, and the Sinhalese with them, also furnishes us with proof confirmatory of the Historical fact—that the Sinhalese was imported into Ceylon by its first Colonists† from North-India.

Mr. Caldwell, who may be regarded as the best authority in all matters relating to Dravidian languages, states:—'The Scythian or Dravidian element is substantially one and the same in all the vernacular languages of India, whether Northern or Southern, but is smallest in amount in those districts of Northern India which were first conquered by the Aryans; greater in the remoter districts of the Dekhan, Telingana, and Mysore; and greatest of all in the Tamil country, *at the Southern extremity of the peninsula*, to

\* "But the Sinhalese, the vernacular language of the Island, is decidedly allied to the *Northern* family, as it is supposed to have nine-tenths of its vocables from the Sanskrit"—*The Rev. S. Hardy* in C. B. A. S. Journal, ii. p. 92.

† 'At the place where mention is made of 'Sihala language,' what can *Sihala language* signify? As it is said that king Sihabāhu took *Siha* captive, so the name *Siha-la* is derived from that circumstance,.....As, again, the city in which Sakkra dwells is named Sakkra-city, so the Island in which the Sihala dwell is called *Sihala-island*. As also people who are natives of a place speak in their native tongue, so likewise the people of this Sihala country make use of the Sihala speech—their language is thence named the *Sihala language*.'—*Pradipikava*, quoted in the *Sidatāṅgarā*, p. xxv..



which the aggressions of the Brahmanical race had not extended in the age of Manu and the Rāmāyana.' p. 39.

This state of things precisely accords with the facts stated in Sinhalese Historical records. For, if the Sinhalese was not imported in an early age into Ceylon from North-India, it is but reasonable to find that the Dravidian element, which grows great and greater as we come downwards to the South, would be *the greatest* in Ceylon, the most distant territory from North-India. Far from such being the fact all the comparisons to which I have submitted the Sinhalese, indisputably prove that the Dravidian element is even less in the Sinhalese than 'in those districts of Northern India which were first conquered by the Aryans.' No one therefore, knowing the position which, geographically, Ceylon occupies in regard to the Tamil country,\* can reconcile this fact with the supposition that the Sinhalese is a South-Indian dialect. On the contrary, the conviction must be inevitable, that the Sinhalese, like the Māgadhī or the Pali,† had been long separated from Northern-India, and had remained fixed in this Island, unaffected by those changes which even the *Maharashtri*, the *dialectus principis* of Varanachi and Lassen, and other undoubted dialects of the Sanskrit, have in course of time undergone in India.

Without entering into other inquiries as to how far the one-tenth (I believe the proportion is really less), the apparently Dravidian element in the Sinhalese, may be traced to other influences and causes, enough, I believe, has been shown to justify the position which I maintain, that our vocabulary presents more cogent evidence than even any of the vernacular dialects of Northern India, of the Sinhalese language having a Sanskrit basis with a very small admixture of a foreign or non-Sanskrit element. In a case

---

\* 'From the evidence of the words in use amongst the early Tamilians,' Mr. Caldwell deduces, amongst other facts, that they had 'no acquaintance with any people beyond sea, except in Ceylon, which was then accessible on foot at low water.' p. 79.

† Kachchāyana's Grammar, p. cvi.

like this where all *lexical* analogies tend to establish a close affinity to languages which are already ascertained to have sprung from a Sanskrit source, I may indeed close the inquiry without at all consulting *Grammar*. But, when with the evidence furnished by the Dictionary we couple the testimony of History, and also find historical facts confirmed by the analogies to which I have already directed attention, it is impossible to resist the conclusion that the Sinhalese is a legitimate descendant of the Sanskrit.

---

#### SECTION FOURTH.

##### *Grammatical Relations.*

'The life and soul of a language, that which constitutes its substantial individuality, and distinguishes it from all others,' says Professor Max Muller, 'is its *Grammar*.' In accordance with this undoubted belief, I purpose in this section, to examine the Grammatical forms of the Sinhalese with a view to ascertain whether they have been imported from the South-Indian, or from the Sanskrit family of languages. In doing so I may as well intimate that I do not intend to enter into an investigation of all grammatical forms, but of such only as have been pointed out as possessing an intimate relationship between the Dravidian and the North-Indian (in which the Sinhalese has been included by some), and also a few of such other forms as may throw light upon the inquiry in hand.

The reader who has followed me through a variety of comparisons of words, with overwhelming results in favor of the proposition with which I have set out, must already be prepared to find the Grammatical structure of our language to accord more intimately with the Sanskrit than with the Dravidian. In this hope he will not indeed be disappointed; but it is, perhaps, right to mention that the Sinhalese have also adopted some forms which bear some affinity to the Dravidian. Founded upon a few coincidences between the Dravidian and the North-Indian vernaculars, in which last I include the Sinhalese, it has been suggested that it would be more correct to represent

the latter as having a Scythian basis with a large and almost overwhelming Sanskrit addition, than as having a Sanskrit basis with a small admixture of a Scythian element. The reverse however of this proposition seems to be correct. For, though Grammar is the best test that may be applied in philological investigations, yet the existence of a stray Dravidian Grammatical form here and there can, no more than a few Dravidian words, be regarded as decisive of the question. 'In general, it appears,' says Bopp,\* 'that in warm regions languages, when they have once burst the old grammatical chain, hasten to their downfall with a far more rapid step than under our milder European sun.' Now, in Ceylon, it is the influence not only of climate, but of circumstances, that has led to a departure from the original grammatical forms and the adoption of others savouring of idioms, peculiar expressions, etc. These analogies will find a solution in the continuous intercourse which we have had with the Dravidians for 24 centuries,—daily speaking their language, and wishing not only to understand them, but to be understood by them. In this state of things it is but natural to find that we, like 'the Bengáli and other new Indian idioms, have really laid aside our old grammatical habiliments, and have partly put on new.\*' But I can promise at the outset, that the changes which our grammatical forms have undergone, are far fewer in number than have been experienced by the Northern vernaculars.

Supposing, however, for the sake of argument, that they are identically the same in the North-Indian vernaculars and the Sinhalese, it is well worthy of consideration, whether the coincidences might not have originated from other than Dravidian influences. Mr. Caldwell, even without the evidence which I have already adduced, and have yet to adduce, has arrived at this conclusion. What he says, in the following extract, of those idioms, applies equally to the Sinhalese:—"Whatever relationship, in point

---

\* Bopp's Comp. Grammar, vol. ii. p. 711.

of blood and race, may originally have subsisted between the northern aborigines and the southern—whatever *ethnological* evidences of their identity may be supposed to exist,—when we view the question *philologically*, and with reference to the evidence which is furnished by their languages alone, the hypothesis of their identity does not appear to me to have been established. It may be true that various analogies in point of grammatical structure appear to connect the Un-Sanscrit element, which is contained in the North-Indian idioms, with the Scythian or Tartar tongues. This connection, however, amounts only to a general relationship to the entire group of Scythian languages; and no special relationship to the Drâvidian languages, *in contra-distinction* to those of the Turkish, the Finnish, or any other Scythian family, has yet been proved to exist. Indeed I conceive that the Scythian substratum of the North-Indian idioms presents a greater number of points of agreement with the Oriental Turkish, or with that Scythian tongue or family of tongues by which the New Persian has been modified, than with any of the Drâvidian languages.

“The principal particulars in which the grammar of the North-Indian idioms accords with that of the Drâvidian languages are as follows:—(1), the inflexion of nouns by means of separate post-fixed particles; (2), the inflexion of the plural by annexing to the unvarying sign of plurality the same suffixes of case as those by which the singular is inflected; (3), the use of a dative or dative-accusative in ‘kô’ or ‘ku.’ (4), the use in several of the northern idioms of two pronouns of the first person plural, the one including, the other excluding the party addressed; (5), the use of post-positions, instead of prepositions; (6), the formation of verbal tenses by means of participles; (7), the situation of the governing word after the word governed. In the particulars above-mentioned the grammar of the North-Indian idioms undoubtedly resembles that of the Drâvidian family: but the argument founded upon this general agreement is to a considerable extent neutralised by the circumstance that those idioms accord in the very same particulars, and

to the very same extent, with the Turkish and several other families of the Scythian group. Not one of those particulars in which the Drâvidian languages differ from the Turkish or the Mongolian (and there are many such points of difference) has as yet been discovered in the North-Indian idioms. For instance, those idioms contain no trace of the relative participle which is used in all the Drâvidian tongues instead of a relative pronoun; they are destitute of the regularly inflected negative verb of the Drâvidian languages; and they contain not one of the Drâvidian pronouns or numerals—not even those which we find in the Scythic tablets of Behistan, and which still survive even in the languages of the Ostiaks and Lapps. If the Un-Sanscrit element contained in the northern vernaculars had been Drâvidian we might also expect to find in their vocabularies a few primary Drâvidian roots—such as the words for ‘head,’ ‘hand,’ ‘foot,’ ‘eye,’ ‘ear,’ &c.; but I have not been able to discover any reliable analogy in words belonging to this class. The only resemblances which have been pointed out are those which Dr. Stevenson has traced in a few words remote from ordinary use, and on which, in the absence of analogy in primary roots, and especially in grammatical structure, it is impossible to place any dependence. The difference between the Drâvidian vocabulary and that of the languages of Northern India with respect to primary roots together with the essential agreement of all the Drâvidian vocabularies one with another, will appear from the following comparative view of the pronouns of the first and second person singular.\* It sometimes happens that where one form of the pronoun is used in the nominative, another survives in the oblique cases, and a third in the verbal inflexions: it also sometimes happens that the ancient form of the pronoun differs from the modern. Where such is the case I have given all extant forms a place in the list, for the purpose of facilitating comparison.

---

\* To which I have taken the liberty to add the Sinhalese pronouns.

## Pronoun of the first person singular:—

## NORTH-INDIAN IDIOMS.

(Sanskrit primary form 'aham,'  
secondary forms, 'ma,' 'mi,' 'm,'  
Turkish primary form, 'man.')

|            |      |
|------------|------|
| Hindi      | main |
| Bengali,   | mûi  |
| Marathi,   | mî   |
| Gujarathi, | hun  |
| Sindhi     | man  |
| Sinhalese  | man  |

## DRAVIDIAN IDIOMS.

|             |                  |
|-------------|------------------|
| Tamil,      | nân, yân, ên, en |
| Canarese,   | ân, nân, en, êne |
| Tulu,       | yân, en, e       |
| Malayalam,  | njân, ên, en, in |
| Telugu,     | nēnu, nâ         |
| Tuda,       | ôn, ân, en, ini  |
| Kôta,       | âne, en, e       |
| Gônd        | âna, ân          |
| Ku          | ân, nâ, ênu, e   |
| Rajamahala, | en               |
| Uraon,      | enan             |

## Pronoun of the second person singular:—

## NORTH-INDIAN IDIOMS.

(Sanskrit primary forms 'tvam,'  
'tav,' 'te,' secondary form, 'si,'  
's;,' Turkish primary form, 'sen.')

|            |             |
|------------|-------------|
| Hindi,     | tun, tu, te |
| Bengali,   | tûi, to     |
| Marathi,   | tûn, tu, to |
| Gujarathi, | tûn, ta     |
| Sindhi,    | tun, to     |
| Sinhalese  | ta, to      |

## DRAVIDIAN IDIOMS.

|            |                  |
|------------|------------------|
| Tamil,     | nî, nin, nei, i, |
| Canarese,  | nin, nînu, t, i  |
| Tulu,      | i, ni, nin       |
| Malayalam, | nî, nin, nan     |
| Telugu,    | nîvu, nî, nin    |
| Tuda,      | nî, nin, i       |
| Kota,      | nî, nin, i       |
| Gônd,      | ima, nî, i       |
| Ku         | fuu, nî, i       |
| Uraon      | nien             |
| Rajamahala | nin              |
| Brahui     | nî               |

Scythic of the Behistun tablets nî

"From the striking dissimilarity existing between the North-Indian pronouns and the Dravidian, it is obvious that, whatever

\* 'Tva-m becomes *tuva-m* in the old Persian; and from *tu* (itself derived from *to*) proceeds the Sanskrit dative *tu-bhayam*, the base of which is allied to, or identical with, the Latin, Armenian, and Pehlvi *tu*, the Æolic and Doric *tu*, the Persian, Afghan, and Singhalese *to*, and the Gothic *thu*. The *th* of the Gothic and Zend, points out the path by which the old Greek *tu* was converted into *Su*.'—Caldwell, p. 311.

may have been the nature and origin of the Scythic influences by which they were modified, those influences do not appear to have been Drâvidian. In the pronouns of almost all the North-Indian languages, the Scythian termination—the obscure ‘*n*’ which forms the final of most of the pronouns—is at once observed. We cannot fail also to notice the entire disappearance of the nominative of the Sanscrit pronoun of the first person singular, and the substitution for it of the Turkish ‘men’ or ‘man:’ but in no connexion, in no number or case, in no compound or verbal inflexion, do we see the least trace of the peculiar personal pronouns of the Dravidian family. Possibly, after all, further research may disclose the existence in the northern vernaculars of distinctively Drâvidian forms and roots; but their existence does not appear to me as yet to be proved; for most of Dr. Stevenson’s analogies take too wide a range, and where they are supposed to be distinctively Drâvidian, they invariably disappear on examination. I conclude, therefore, that the Un-Sanscrit portion of the northern languages cannot safely be placed in the same category with the southern, except perhaps in the sense of both being Scythian rather than Indo-European.” p. 42.

In addition to the Grammatical relations which may be deduced from the Lexical analogies, to which I have already alluded, I shall now proceed with further proof, noticing in the course of my observations the coincidences to which Dr. Stevenson and Mr. Caldwell have attracted attention. My remarks and investigations will here be confined to (1) *Formation of Words*; (2) *Nouns*,—their gender, number, declension, inflexional and periphrastic; (3) *Cases*, the nominative, the vocative, the accusative, the instrumental, the auxiliary, the dative, the genitive, the locative, and the ablative; (4) *Adjectives*; (5) *Pronouns*,—personal, intensive, demonstrative, and interrogative; (6) *Prepositions*; (7) *Verbs*,—the negative, and passive voices, the causal and auxiliary verb; (8) *Conjugations*,—the present, past, and future tense, the participle and the infinitive; (9) *the Relative Participial Adjective*, (10) *Adverbs*.

## FORMATION OF WORDS.

i. The Dravidian dialects differ from the Sanskrit in generally using the crude root of the verb as the imperative of the second person singular. This, I venture to assert, was not the principle upon which that mood of the verb was originally formed in the Sinhalese. The Sidatsangarà gives (see p. 61) four inflexions, and the Sinhalese scholar knows that in practice we use a variety of other honorific terminations to suit the peculiar position of the party addressed.\* Take for instance the radical *ka*, 'eat.' If we tell one *ka eka*, no one will understand the *ka* in the sense of an imperative; to convey which it would be necessary to say *kanu*, *ka-nne*, *hâ-piya*. So likewise *denu*, *denne*, *diya*, to form the imperative of *de* 'give;' *karanu*, *karanne*, *karava*, *kara-piya*, to express the imperative *kara*, 'do;' etc. The general rule in the Sidatsangarà is that the imperative takes 'nu' for its inflexion as *karanu bojannu*; see § 56. There is however an occasional exception to this rule, which favors the Dravidian principle when the radical ends with *a*, as *boja*, 'eat,' and *bala*, 'behold.' But this is of very rare occurrence, for even in those cases the Sinhalese, in order to mark the imperative mood unmistakably, adds a *va* to the root, as *balava*, 'behold.' See Sinhalese version of Mat. cap. iii. 16, 17, given in my *Contributions to Oriental Literature*, vol. i. p. 95. The peculiarity here noticed, and which is the rule in the Dravidian dialects, can therefore only be regarded as an *exceptional* usage in the Sinhalese.

ii. The Dravidians obtain many words for ordinary objects from verbal roots. Thus *adî* is both 'beat' and 'blow'; *nilam* 'ground' comes from *nil* 'to stand;' *mâdu* 'ox,' from *mâdu*, Canarese 'to do;' *âdu* 'sheep' from *adu* 'to frisk;' *hurangu* 'monkey,' from *kura* 'to sound;' *pakal* 'day,' from *pagu* 'to portion;' *kan* 'eye,' from *kan* 'to see;' *mukku* 'nose,' from *mugu* Canarese 'to smell,' etc. etc. For all these names, I need scarcely say, we have differ-

---

\* See Article on Terms of Address in Ceylon. A. S. Journal for 1856—8.



ent Sinhalese words, derived from different radicals, which bear the closest affinity to the Sanskrit or Pāli.

I shall tabularize them as follows:—

|        | <i>Pali</i> | <i>Sinhalese.</i> | <i>Tamil.</i> |
|--------|-------------|-------------------|---------------|
| Ground | bhūmi       | bima              | nilam         |
| Ox     | gava        | gon               | mādu          |
| Goat   | aja         | { aja<br>elu      | ādu           |
| Monkey | vā-nara     | { āndurā<br>rilā  | kurangu       |
| Day    | dā          | dā                | pakal         |
| Eye    | achchi      | æsa               | kan           |
| Nose   | nāsa        | nāsa              | mukku         |
| Hand   | hattha      | ata               | kai           |

iii. As the Dravidian dialects adopt a class of derivative words, which in the Sanskrit family may be treated as primitives, so likewise where the latter class of languages, especially the Sinhalese, adopt different appropriate masculine and feminine names, the former simply alter the masculine into the feminine by inflexion; e. g.

|          | <i>Pali.</i> | <i>Sinhalese.</i> | <i>Tamil.</i> |
|----------|--------------|-------------------|---------------|
| Man      | manussa      | minis             | maniden       |
| Wo-man   | itthi        | { itiri<br>gænī   | manidl        |
| Son      | putta        | putā              | makan         |
| Daughter | dhītu        | dū                | makal         |
| King     | rāja         | rāja              | rāsā          |
| Queen    | rājani       | biso              | rāsāti        |
| He       | so           | ohu               | avan          |
| She      | sā           | æ                 | aval          |

iv. No one conversant with the Tamil can fail to have observed the successive formative and inflexional particles and pronominal fragments which are added to a Dravidian monosyllabic root; as *per-ugugiradu* 'it increases' from *per*. This expansion is not found in the Sinhalese, which hardly takes a termination of more than two

syllables; as *bebili-ni* 'it brightens.' Examine the nominal roots in the Sidatsangarâ, § 58.

v. The Dravidian formatives are chiefly *gu*, *ngu*, *kku*=*ch* or *nehu*, *su* or *chu*, *du*, *ndu*, *ttu*, *bu*, *mbu* or *ppu*. The Sinhalese possesses none of these. It takes others such as a *va*, *i*, *ta*, *vat*, etc. Take, for instance, the Tamil *pada-gu* 'boat;' the Sinhalese cuts off the formative, and adopts simple *pâda*, or adds a *va* to it, whence it becomes *pâru-va*. For the Sinhalese inflexional terminations, See Sidatsangarâ, § 58.

vi. In the formation of the adjective from the noun, the Dravidian presents a peculiarity distinguishable from the Sinhalese. For this purpose, or for qualifying another noun, or for converting an intransitive into a transitive verb, or for the purpose of forming a noun from verbal themes, the Tamil has to reduplicate the final consonant. This process of reduplication is unknown to the Sinhalese. E. g.; from *harak* 'ox' (Sinhalese) is formed *harak-hama* 'ox-hide;' but from *mâdu* 'ox' (Tamil) is formed *mattu-(t)-tol* 'ox-hide.' Also, from *duva* (Sinhalese) 'run' comes *duva-va* 'cause to run,' so much like the Sanskrit *ya*; whilst the Tamil would reduplicate the *d* (=t) in *odu* and render it *ottu*. Again, whilst the Tamil cannot obtain *elattu* 'writing' without reduplicating the *d* (=t) in *cladu* 'writing,' the Sinhalese converts the simple radical with a single *m*; as *liya* 'write;' *liyu-ma* 'writing.'

vii. The formation of compounds in the Sinhalese is entirely after the fashion of Sanskrit compounds. See Sidatsangarâ § 35.

viii. The Sanskrit and some of the Indo-European dialects are fond of combining clashing consonants. The Dravidian dialects, on the contrary, aim at ease and softness, and are unable to utter two consonants of different classes as *svâmi* without introducing a vowel between them, as *suvâmi*, or without cutting off one of the consonants as in *sâmi*. In this respect the Sinhalese resembles the Dravidian; but I must warn the reader against any inference therefrom that the Sinhalese is related to the Dravidian. For, it will be observed that this is a peculiarity which distinguishes the

Sanskrit from not only the Sinhalese but its very parent the Pāli, and other Prakrits of undoubtedly Sanskrit origin. This will be rendered manifest by the following table of Sanskrit, Pali, and Sinhalese words, which show the growing reluctance with which each generation has cast away, what even all Northerners must admit, the difficulty of expressing heterogeneous sounds, as in the following:—

|         | <i>Sanskrit.</i> | <i>Pali.</i> | <i>Sinhalese,</i> |
|---------|------------------|--------------|-------------------|
| Head    | sīrsa            | sisa         | hisa              |
| Full    | pūrṇa            | puṇna        | pun               |
| Limb    | gâtra            | gatta        | gat               |
| Raiment | vastra           | vattha       | vat               |
| Mouth   | vaktra           | vatta        | vat               |
| Eye     | netra            | netta        | net               |
| Demon   | râksha           | rakkha       | rakus             |
| Heaven  | svarga           | sagga        | saga              |
| Pearl   | mukta            | mutta        | mutu              |
| Name    | Lakṣmana         | Lakkhana     | Lakkana           |
| Agent   | kartru           | kattu        | katu              |
| Above   | ûrdhvan          | uddhan       | uda               |

ix. Another peculiarity observable in the formation of words may here be mentioned. Whilst, as a general rule, in the Dravidian, as in the Scythian family of tongues, ‘neither the vowel nor the consonant (or consonants) of which the root is composed, sustains any change or modification on the addition of the signs of gender, number, and case, or of person, tense, and mood; which are successively agglutinated to the root, not welded into combination with it,’\*—the vowels in the Sinhalese as well as in the Indo-European radical, are, in general, modified by the addition of the suffixes of case and tense. E. g. the Sinhalese word *kolu* ‘boy,’ which comes from *keli* ‘to sport,’ is changed into *kolla* in the masculine, and *keli* in the feminine. The word *balu* ‘dog’ be-

---

\* Caldwell, p. 164.

comes *ballà* in the singular,—and *balló* in the plural. The same word serves as an example of the change which it undergoes in the different cases. Again, the root *daka* ‘to see,’ becomes *daki-mi* ‘I see’ in the present tense; *duti-mi* ‘I saw’ in the past tense; *dakinnemi* ‘I shall see’ in the future tense; and *dæka* ‘having seen’ in the participle.\*

#### NOUN.

*Gender*—In entering upon the Noun, its Gender demands attention first. The Sanskrit family recognize besides the two natural genders, another—the *neuter* or the *eunuch*. To the Sinhalese are, however, known only the two first.† See Sidatsangarâ, § 24. This is quite consistent with the practice of the Sanskrit. For, although the *kltva*, according to its original intention, had to represent inanimate nature only; yet when it is remembered that it has not every where confined itself to these old limits, and that the Sanskrit imparts life to what is inanimate, and, on the other hand, (according to the view then taken), impairs the personality of what is by nature animate; (Bopp. i. p. 126), a language formed

---

\* For different other changes which the radical undergoes, see my *Introduction to Sinhalese Grammar*, p. 17 et seq.

† In the Dravidian languages all nouns denoting inanimate substances and irrational beings are of the neuter gender. The distinction of male and female appears only in the pronouns of the third person; in the adjectives (properly appellative nouns) which denote rational beings, and are formed by suffixing the pronominal terminations; and in the third person of the verb, which, being formed by suffixing the same pronominal terminations, has three forms in the singular and two in the plural, to distinguish the several genders, and in accordance with the pronouns of the third person. In all other cases where it is required to mark the distinction of gender, separate words signifying ‘male’ and ‘female’ are prefixed; but, even in such cases, though the object denoted be the male or female of an animal, the noun which denotes it does not cease to be considered neuter, and neuter forms of the pronoun and verb are required to be conjoined with it. This rule presents a marked contrast to the rules respecting gender which we find in the vivid and highly imaginative Sanscrit, and in the other Indo-European languages, but it accords with the usage of all the languages of the Scythian group. *Caldwell’s Dravidian Grammar*, p. 34.

from it is sure to fail in recognizing the intention which was not carried out in practice; and in its endeavour to simplify Grammatical forms, is likely, as the Sinhalese has done, to make a distribution of all nature into two classes, the *male* and *female*. The *rationale* of this is to be found in various other parts of our Grammatical System.

It appears very plainly that this absence of the *neuter* gender is owing to an effort on the part of the Sinhalese to simplify the difficult process of discriminating the genders in the Sanskrit, and to adopt itself to circumstances, one of which is the absence in the Sinhalese of that simple termination which the Sanskrit has adopted for the *neuter* as distinguishable from the masculine and feminine. Now, according to the formation of words in the Sinhalese, no system of Grammar or philology can devise a rational plan by which the neuter may be distinguished from the two natural genders. If the neuter was confined to inanimate nature alone, this would be possible; but when the greater part of names expressive of inanimate nature are found as *masculines* and *feminines*, there was no alternative but to ignore the neuter altogether. This reasoning would be inadmissible but for the undoubted testimony which this very department of Grammar furnishes us as to the Sinhalese being a derivative of the Pâli and Sanskrit. I here allude to the rule by which all Sanskrit and Pâli neuter names are regarded in the Sinhalese as *masculine*. See note (†) at p. 20 of the *Sidatsangarâ*. The formation too, of the two natural genders is precisely in accordance with the development of the Sanskrit, the feminine marking its distinction by broader and more sonant vowels.

When, however, we look to the Tamil which has all the three genders, and therefore is different from the Sinhalese, we observe that not only are all nouns denoting inanimate objects and irrational beings, placed in the neuter gender; but in most cases separate words denoting male or female are added to neuter nouns. It would also seem, that the long *î*, which constitutes the rule in the formation of the Sinhalese and the Sanskrit feminine, forms the exception in the Dravidian dialects. See *Caldwell*, p. 181.

**Number.**—In turning our attention to the Number of the Sinhalese noun, we again meet with evidence of an effort to simplify the superabundant forms of the Sanskrit. ‘The dual,’ says Bopp, ‘like the neuter, in course of time is the first to be lost with the weakening of the vitality of the view taken by the same, or is more and more straitened in its use, and then replaced by the abstract plural expressive of infinite number.’ Vol. i. p. 126. ‘The Pāli has only so much of the dual as the Latin viz., a remnant of it in two words, which signify *two* and *both*.’ p. 127. It is entirely wanting in the Prākritis as in the Sinhalese, which does not even recognize the duality of the pronoun adopted by the Tamils in common with the Northern vernaculars. See remarks thereon *infra*.

**Declension.**—The Sinhalese, like some of the Dravidian dialects, is not deficient in the number of cases required to mark the relations of nouns. Unlike the Sanskrit, the Sinhalese employs the crude radical without inflexion,\* and therefore attempts to simplify a variety of forms which even the Sanskrit has declined to adopt in the primary forms of compounds; yet the rule in Sinhalese Grammar is, as in the Sanskrit, to inflect the noun to express the different relations of case. It is unnecessary to specify all the modifications which nouns undergo. They are all given in the *Sidatsangarâ*, p. 27.\* Suffice it to present two declensions.

## SANDA=TINGEL, ‘MOON.’

|      | <i>Singular.</i>  |               | <i>Plural.</i>    |                  |
|------|-------------------|---------------|-------------------|------------------|
|      | <i>Sinhalese.</i> | <i>Tamil.</i> | <i>Sinhalese.</i> | <i>Tamil.</i>    |
| No.  | Sanda             | Tingel        | Sanda-hu          | Tingel-kal       |
| Vo.  | Sanda             | Tingāl        | Sand-eni          | Tingel-kāl       |
| Acc. | Sandu             | Tingel-ei     | Sand-um           | Tingel-kalei     |
| Ins. | Sanda-hu          | Tingel-āl     | Sand-uma          | Tingel-kalāl     |
| Aux. | Sandu             | —             | Sand-um           | —                |
| Dat. | Sandata           | Tingel-ukku   | Sanda-nata        | Tingel-kalukka   |
| Ab.  | Sand-en           | Tingel-enindu | Sanda-nen         | Tingel-kalinindu |
| Gen. | Sand-uge          | Tingel-udei   | Sanda-nage        | Tingel-kal-udei  |
| Loc. | Sande             | Tingel-il     | Sanda-uhi         | Tingel-kal-il    |

\* Also see my Introduction to Sinhalese Grammar, p. 17.

## GAS=MARAM, 'TREE.'

| <i>Singular.</i> |                   |               | <i>Plural.</i>    |                 |
|------------------|-------------------|---------------|-------------------|-----------------|
|                  | <i>Sinhalese.</i> | <i>Tamil.</i> | <i>Sinhalese.</i> | <i>Tamil.</i>   |
| No.              | Gasa              | Maram         | Gas               | Maran-gal       |
| Vo.              | Gasa              | Marâm         | Gas-ni            | Maran-gâl       |
| Acc.             | Gasa-ta           | Marattei      | Gas               | Man-galei       |
| Ins.             | Gasin             | Mara-ttâl     | Gas-val-in        | Maran-galâl     |
| Aux.             | Gas-en            | —             | Gas-val-in        | —               |
| D.               | Gasa-ta           | Mara-ttuku    | Gas-vala-ta       | Maran-galattuku |
| Ab.              | Gas-en            | Marattu-nindu | Gas-val-in        | Maran-galinindu |
| Gen.             | Gas-e             | Marattudei    | Gas vala          | Maran-gal-udei  |
| Loc.             | Gas-e             | Marattil      | Gas-hi            | Maran-gal-il    |

On a careful examination of the above forms, the reader cannot fail to observe that in the Sinhalese (1) the radical *is inflected in the Nominative case*,\* as in all the oblique cases; (2) that although the plural nominative occasionally takes a sign of plurality, yet *it is not* invariably *to that sign*, but to the root, that the inflexional signs are annexed in the oblique cases; (3) that all the inflexions in the plural *are not* every where *identical* with those in the singular,—facts, which serve to distinguish the Sinhalese not only from the Dravidian but from the North-Indian dialects.†

With respect to the principle of pluralization, it will also be observed that the Sinhalese noun, like the Dravidian, *is not ordinarily indefinite*, and does not depend upon its connection in a sentence to determine its number. As in the primitive Indo-European tongues, the plural of a Sinhalese word is carefully distinguished from the singular. It is true that in modern usage we find a few nouns which take in the plural *val*, like the Tamil *gal*, but it should be borne in mind that that formative is not an inflexion, but that which may be regarded as a complete word by itself, serving, when added to nouns indicating inanimate objects, to render the expression a compound, like 'stone-heap' or 'trees-mass.' Thus *ge*, 'house,' becomes in the plural *ge-val*.

\* The Dravidian nominative singular is simply the inflexional base. *Caldwell*, p. 204.

† The signs of cases are suffixed to the sign of plurality in the Dravidian. *ib.*

This is supposed by some to be identical with the *gal* in the Tamil *uttu-gal*, 'houses.' Dr. Stevenson is of opinion that this addition is an abbreviation of the Sanskrit *sakala* (= *sagala*, Tamil) 'all.' But, says Caldwell, the root signifying *all*, which the Dravidians have preferred to retain, viz., *ell*, is connected, not with the [Greek] *ol* 'whole,' the Hebrew *kol*, &c., but with the Saxon *eal*, English *all*. Whether it comes from the one or the other, it is indeed very clear that this addition of pluralization conveys, like the Sinhalese word *siy-al*,—'all.' Now in the Sinhalese only a few inanimate nouns take this *val* as a sign of pluralization; and in some instances it is found in the oblique cases, and never in the nominative; thus *ata* 'hand,' *at* 'hands' *at-vala* 'in hands;' *gasa* 'tree,' *gas* 'trees,' *gas-vala* 'in trees.' Hence it accords well with Professor Max Muller's belief of this being a compound expression like *animal-mass* for 'animals,' or *stone-heap* for 'stones.' There is another reason which induces me to believe that this *val*, in the sense of *vana* for a 'mass,' is a word by itself. It is this,—that like *val* the Sinhalese occasionally takes *vara* in a few nouns for the formation of the plural, as *guru* 'teacher,' *guru-varu* 'teachers'; *raja* 'king,' *raja-varu* 'kings.' In these instances *vara* is clearly an additional word to denote 'respect;' for it will be seen that as the plural of both words is *ordinarily* formed by the addition of (h)*u*, as *guru*, *guruhu*; *raja*, *rajahu*, they take the same *u* in the plural even after the addition of *vara*; and that this *varu* termination is never used except in connection with masculine or feminine names that deserve respect, as *val* is seldom used except in connection with inanimate nouns implying objects that are usually associated in the mind with *heap* or *mass*.

The Sinhalese has also, like some of the Scythian tongues, a secondary or periphrastic mode of denoting some of the relations of nouns, and in this respect it accords with, and adopts some of, the words found in the North-Indian vernaculars. E. g.

Nominative—*tema*.

Instrumental—*risin*, 'by.'



Auxiliary—*karana-kota*, 'by means of.'

Dative—*pinisa* or *vas*, 'for.'

Locative—*Kerehi*, 'in.'

Ablative—*Keren*, 'from.'

These signs are common to both numbers, except *tema* which is only used in the singular, its plural being *tumu*. Nouns in the singular also take an *ek* in the Sinhalese, to express the *indefinite* as *harak-eku-ta* 'to-a-bullock.'\*

*Tema*, in the Sinhalese, derived from the Sanskrit *âtman* 'self,' not only expresses the Nominative case, but also conveys the gender of the noun to which it is added. The Sidatsangarâ says: "Observe also, that in this case the suffixes *tema* for the masculine singular, *tomo* for the feminine singular, and *tumu* for both genders in the plural number, may be used in *periphrases and commentaries*."

The periphrastic instrumental *visin*, from the Pâli *vasena* 'by authority,' in the sense of the agent or instrument, is also used in the Sinhalese. *Karana-kota*—the Pali *karani-kritya* 'having accomplished a means of action,' is the periphrastic sign of the auxiliary, which we have doubtless brought over to Ceylon from Northern India, since we find it unmistakeably in the Murâthi *karûna*, so different from all Dravidian case-signs. I may also observe that the very name for the *Auxiliary* case (the *Karana*) is derived from this case-sign. The dative *pinisa*—Pâli *panissaya*, is not exactly, as the others are, a universal case-sign for the dative; but is used to express 'for,' or 'for the purpose.' *Kerehi* is the periphrastic locative sign, and comes from *kara* 'to do,' from whence it obtains the signification of proximity or 'nearness,' and thence, with the addition of the locative sign, the idea of *locality*. The ablative *keren* is also from *kara* with the proper sign *en*.

---

\* See Vibat-maldama in the Appendix to Sidatsangarâ, p. 91.

## CASES.

*The Nominative*, in the Dravidian dialects, is 'the noun itself,' or the inflexional base, without addition or alteration. The Sinhalese nominative takes *e*, *â* in the singular, and *ô*, *lu* in the plural; and these present the most marked difference to the exceptional formations of the Tamil neuter nominative, and the Canarese *nâ* and *ta*. Dr. Stevenson observes that in the Dravidian as well as in the North-Indian vernaculars, the nominative is substituted for the accusative, *et vice versa*. This is not the case in the Sinhalese; for no one, not even the rudest rustic amongst us who knows not the use of case-signs, will ever say *ballâ gâsimi* 'canes percuti' but *ballata gâsimi* 'canem percuti.' It is, indeed, true that the illiterate Sinhalese do, as stated by Dr. Stevenson, occasionally use the accusative for the nominative. This, I have, and I believe satisfactorily, accounted for elsewhere,\* and shall therefore proceed to

*The Vocative Case*. In the Dravidian there is properly no case-sign for the *Vocative*. It is formed by a simple sign of emphasis, different from the Sinhalese, which takes *æ*, *a* and *â* in the singular, and *in*, *en*, *nen*, *ini*, *eni*, *neni*, and *ni* in the plural. These, it may be remarked, are different also both in form and principle from the *ir*, a fragment of the *nîr* 'you,' which the Tamils use in the plural.

Again, it will be observed that the exceptional usage in the Sinhalese, by which the Nominative is employed to express the Vocative, accords with the Indo-European languages.

*The Accusative Case*. 'Ordinarily,' says Caldwell, 'the North-Indian vernaculars are distinguished from the Southern by their use of the dative case-sign for the *Accusative*.' This is no less a peculiarity in the Sinhalese, which is distinguishable from the Dravidian family, in which, if we except the Gônd, the Dative is quite distinct from the accusative.

---

† See my *Contributions to Oriental Literature*, vol. i. p. 46.

The only accusative sign which the Tamil has, is *ei*. This, I need scarcely say, is different from all signs in the Sinhalese, in which the only termination that may approach the Dravidian, is the Canarese *a*, and this is of very rare occurrence in our language.

In turning our attention from the mere formation of the case-signs, to the Syntax of the accusative case, we find the Sinhalese to accord with the Sanskrit and the Latin; e. g., where reference is made to *duration of time*, all the above languages use the accusative. For other affinities, see Sidatsangarâ, p. 29.

*The Instrumental Case.* The Telugu changes the locative *â* into *ta*, to express the instrumental or the auxiliary, both which are treated by Tamils and others as the instrumental. See Sidatsangarâ, p. 31. Now, according to Caldwell, the Canarese instrumental suffix *im* is identical with *in*, the Tamil 'ablative of motion.' If this is the case, its tendency to confound the instrumental with the ablative, is in accordance with the Latin and the Greek, which confound the auxiliary with the instrumental. Even the English, in which, as Caldwell points out, '*by*' in the sense of 'close by' was originally a locative, would indicate the origin of the Telugu instrumental.

The Tamil suffix for the instrumental is clearly *al*, and bears no analogy to the Sinhalese terminations *a*, *â*, *u*, *hu* in the singular, and *an*, *âna*, *na*, *n*, and *un* in the plural.

The use of the instrumental is gradually getting into disuse amongst the lower orders of the Sinhalese. There is also much difficulty felt by learners in comprehending the difference between the *nominative* and the *instrumental*. People say *mama karana vade*=*nân sekir vele*, Tamil. Now, *karana*=*sekir* is not a complete verb. It is devoid of vitality, though possessed of an attribute, and the tense. It approaches nearest to an English participle; and, considering its function in the above sentence, we may call it the *relative participle*, or as the Tamil Grammarians name it, *peyer echam* 'noun-defect' or 'noun-complement;' i. e., as explained by Caldwell, a word which requires the complement of a noun to complete its signification. We find it always associated

with two nouns, one which it qualifies, and another (either expressed or understood) which indicates its agent. The proper designation of it would then seem to be a *relative participial adjective*. Having ascertained the real force of *karana*, let us inquire in which of the two agent-cases we should place the noun-agent. We cannot put it in the nominative, because our Grammar teaches us that the nominative should be followed by a complete verb 'expressive of an *attribute*, of *time*, and of an *assertion*.\* We are therefore constrained to use in the sentence before us the instrumental *mâ*, and not the nominative *mama*.

The sense of the *instrumental* is also preserved in a similarly constructed English sentence; e. g., *karana de* is 'being-done thing' or 'the thing that is being done.' Now, if we add an agent to the act, we have *mama karana de* 'I being-done thing' or 'the thing that is being done [by] I.' This sign 'by' or *visin* is understood in the Sinhalese, in which case the noun takes the sign of the case, and it is necessary that the nominative *mama* should be changed into the instrumental *mâ* 'by me.' The sentence itself would then run grammatically both in Sinhalese and English, thus; *mâ karana de* 'the thing that is done by me.' On comparing the Murâthi, the Sinhalese, and the Sanskrit, I find that the prevalence of an instrumental case in connection with the passive verb, and the relative participial adjective, is one of the most remarkable features in the Syntax of all these languages. 'This instrumental construction after passive verbs' says Professor Mon. Williams,† 'is a favorite idiom in Sanskrit prose composition;' and our best prose writers abound with instances of the instrumental case in the connection above stated.

It is unnecessary to say more on the subject; nor to inquire into the usage in the Tamil. All my observations here as elsewhere

---

\* See my Sinhalese Grammar, Section viii. § 92; also Harrison's Structure of the English language, p. 315.

† See his Grammar, p. 366.

show that the usage which is springing up in our language, is unwarranted by Grammar and the usage of our standard writers. I shall treat of the idiom involved in the use of an expression, as in *mâ karana de*, when I shall have entered upon the Section on *Verbs*.

*The Auxiliary Case*, which is found in the Sinhalese, owes its origin entirely to the Sanskrit. Although the Dravidians have some notion of it, yet it is found confounded by them with the instrumental. There is however one important particular by which the Sinhalese auxiliary may be distinguished from even the Sanskrit,—that whilst the latter adopts the instrumental suffixes for the auxiliary, the former have generally an entirely different set of inflexions for each of the two cases. A careful investigation of grammatical forms in the Indo-European, the North-Indian, and Dravidian dialects, convinces me that there is a tendency in all of them towards a distinction between the instrumental and the auxiliary, which Caldwell denominates the *conjunctive*, although the Sinhalese alone have marked the distinction with special suffixes. See *Sidatsangarâ*, p. 30.

*The Dative Case*. One of the striking analogies, to which Dr. Stevenson refers as running through the North-Indian and the Dravidian dialects, is the resemblance in the Dative *ki ku ge*,\* which are different from the Sanskrit and all Indo-European dialects.

Caldwell also states that 'in the vernaculars of Northern India, which are deeply tinged with Scythian characteristics, we find a suffix which appears to be not only similar to the Dravidian, but the same.' p. 225. In giving examples from the Northern vernaculars, Caldwell gives *ghai* as the 'Sinhalese' form of the Hindi *ko* and *ku*. This is clearly not so. We have no *g* or *k* in the

---

\* In the primitive Indo-European tongues we discover no trace of any such dative suffix or case-sign as the Dravidian 'ku;' but on turning to the Scythian family, interesting analogies meet us at every step.

in the Dative Case. The only Sinhalese dative termination, *ta*, presents the most unequivocal testimony of its none-relation to the Dravidian; and in this *ta* may be recognized the Murāthi *la*, the absence of which in her sisters is probably owing to Dravidian influences. Turning our attention to the Syntax of this case we find that words expressing 'cause or purpose' take a dative in the Sinhalese as in Sanskrit and Latin. 'Connected, with this application of the dative case' says Professor H. H. Wilson\* 'is its optional substitution [in the Sanskrit] for the infinitive after a verb.' So clearly is this the case in the Sinhalese infinitive, e. g., *lia* (*n*) *ta* as in the English 'to-write,' that the sign of the dative case is found bodily transferred to the infinitive. It would be idle to allude to various other syntactical laws which are identical in the formation of the dative in these languages, and which an ordinary acquaintance with them cannot fail to exhibit. I shall therefore pass on to

vii. *The Genitive Case.*—The signs of this in the Tamil are *in*, *an*, and *ni*, the first being the most frequent. Here again Dr. Stevenson says the letter *n* is a general characteristic of the *genitive singular*. Now, although it may be found in the Tamil *in*, the Telegu *ni*, and in the English *mine*, it nevertheless is deficient in the Sinhalese, and in the North-Indian vernaculars, 'of all which,' as stated by Caldwell, 'the Gujarathi is the only one which contains a form of the genitive resembling that which we have been examining.† I need scarcely add that the Sinhalese take *ge* besides the dative *ta*; and that although a simple *n* is also given with *un*, in the Sidatsangarā, yet the use of them is so very rare that the author seems to have had some difficulty in finding out examples of their use; and even in those which the Translator has supplied, there

---

\* Introduction to Sanskrit Grammar, p. 388

† Caldwell's Dravidian Grammar, p. 237.

is this peculiarity to be observed—that the *n* is simply a plural euphonic addition in a compound rendering.

But the resemblance to which Dr. Stevenson refers is, that this *n* is a general characteristic of the genitive *singular*. It is decidedly not found as a singular suffix in the Sinhalese ; see *Sidatsangarâ*, p. 178. Even if it were, the fact would furnish no evidence in favor of the analogy which Dr. Stevenson seeks to establish. For, as remarked by Caldwell “both in the Sanskrit and in other members of the Indo-European family, we may observe distinct traces of the adjectival or the genetival use of a particle, of which the consonant *n* is the most essential element.”\* He also adds in the same page, “The Lethunian goes further than any other Indo-European tongue in resemblance to the Tamil in this point, for it not only uses *n* as a sign of the pronominal possessive (of the first person,) but it adopts this genetival *man* as the inflexional base of all the rest of the oblique cases of the same pronoun.”

Moreover, the analogy which Dr. Stevenson supposes to exist between the Sinhalese *ge* and the Telegu *yokka*, entirely illusory. Between the *g* in the Sinhalese genitive, and the *k* in the Telegu, there is, I feel persuaded, no relation whatever, since the Sinhalese genitive sign represents the *ge* or ‘the habitation’ in the sense of the “possession” which this case implies.

A peculiarity connected with the Sinhalese case-signs of the genitive, exhibits its very near relation to the Sanskrit. It is this. In the Sanskrit, the genitive is constantly interchangeable with the dative and the accusative, etc. ‘This vague use of the genitive,’ says Professor Monier Williams † ‘to express various relations, prevails also in early Greek.’ It likewise prevails in the Sinhalese. Compare the case-sign given in the *Sidatsangarâ*, p. 37, as those peculiar to the genitive, the dative, and the accusative.

---

\* Caldwell's Dravidian Grammar, p. 238.

† See his Sanskrit Grammar, p. 354.

viii. *The Locative Case*.—The Dravidian Locative sign present a marked contrast with the Sinhalese. Compare Sidatsangarâ, p. 180, with Caldwell's Dravidian Grammar, p. 247 et seq. 'None of the Dravidian affixes of the locative,' says the last mentioned writer, 'bears any resemblance to the locative case-sign of the Sanskrit, of any other of the Indo-European languages, or of the North-Indian vernaculars.'

ix. *The Ablative Case* seems to have been introduced into Dravidian Grammars 'out of deference to the principles of Sanskrit Grammarians.' It is therefore unnecessary to institute any comparisons between the Dravidian and the Sinhalese beyond stating that in this respect the Sinhalese presents one other in addition to the many unequivocal proofs I have adduced to show its non-relation to the Dravidian.

#### ADJECTIVES.

All languages that are entitled to be considered as of high antiquity, whilst drawing a distinction in the sense of a *name* and its *attribute*, look upon adjectives as nouns, and invest them with number, case, and gender. This peculiarity may be recognized in all those dialects which stand in fraternal connection with the Sanskrit. But in the languages which have arisen from these Sanskrit daughters, the tendency to simplify the contractions, evolutions, involutions, and inflexions of case, gender, and number, in which their mothers delight, is indeed manifest. The Sinhalese in their Grammatical System place the *adjective* amongst nouns [see Sidatsangarâ, § 21 c.]; and even clothe it with a sign of *gender*, and *case*; as, *hali* from *hela* 'white'; *hotá* 'short one,' from *kota* 'short'; *pæti* 'lass,' from *pæti* 'young'; *gori* 'white person' from *gora* 'white'; *kali* 'black person' from *kalu* 'black,' etc. These are only a few remnants of a large Sanskritic developement, which must doubtless have existed upon the early formation of the Sinhalese. Even some of these are being gradually given up; and we find that, generally, the Sinhalese, like the English adjective, has



at present no variation, undergoes no change of form, and takes its position immediately before the noun which it qualifies. \* This is also the case at present with the North-Indian dialects ; and, what is still more remarkable, they possess, like the Sinhalese, a few remnants of the early developement of gender, number, and case ; e. g., in the Murâthi many adjectives have separate terminations for the three genders, and have two cases. †

We are thus enabled to assign to the Sinhalese and the North-Indian dialects a common origin, though like many modern Indo-European tongues, they have gradually given up the peculiarities of the adjective, which distinguish them from the dialects from which they have arisen.

#### PRONOUNS.

Next to inseparable Prepositions, of which I shall treat hereafter, there is no class of words, which more clearly proves the non-relation of the Sinhalese to the Dravidian, than the Pronouns. Indeed they throw generally much light on the relationship of languages ; for, as remarked by Caldwell, ‘the personal pronouns, and especially those of the first and second person singular, evince more of the quality of permanence than any other parts of speech, and are generally found to change but little in the lapse of ages.’

In laying before the reader a long extract from the writer above-named in which he compares the Dravidian, with the North-Indian

---

\* “ In Sanskrit and all the Indo-European tongues, adjectives are declined like substantives, and agree with the substantives to which they are conjoined, in gender, number and case. In the Dravidian languages, as in the Scythian, adjectives are incapable of declension. When used separately as abstract nouns of quality, which is the original and natural character of Dravidian adjectives, they are subject to all the affections of substantives; but when they are used adjectively, i. e. to qualify other substantives, they do not admit of any inflectional change, but are simply prefixed to the nouns which they qualify.” *Caldwell's Dravidian Grammar*, p. 35.

† See Dr. Stevenson's *Murâthi Grammar*, pp. 77—78.

personal pronouns, I have taken the liberty to insert the Sinhalese forms under the Sanskrit family to which they are allied ; and I need therefore do little more here than refer the reader to his Tables, given *ante*, p. 41. But some further examination into the subject may not prove uninteresting.

From the results of the valuable investigations of the same writer, *nān* appears to be the Tamil nominative of the first person. There is very little difference, if any at all, in the other Dravidian dialects which also take *na* as the radical of this person. Now the Sinhalese has *mam* which may be seen as in the Persian *man*, the Sindhi *mān* and the Oriental Turkish *mēn*, which is the same in a variety of Scythian tongues. It is found in those languages, in which *ni* is used as the equivalent of personality in the verbal terminations. This usage may also be observed in the North-Indian vernaculars, as in the Sinhalese.

The base of the Tamil pronoun *ni* 'thou' [second person] is the same in the Malâyilam, the Tudâ, etc., and seem to come from the pronoun of the first person. On a comparison of the several Dravidian dialects *ni*, *nu* or *na* may be pronounced to have been its original form. The Sinhalese *tā* or *to* has no relation whatever to these bases, and on the contrary bears the nearest affinity to the Sanskrit *tvam*, a form which pervades nearly all Indo-European and the North-Indian dialects.

From an examination of the pronouns for the first and second person *singular*, I shall proceed to examine their forms in the *plural* ; and here we find a peculiarity in the Sinhalese, not only distinguishable from the Dravidian, but also from the Pāli and the Prākṛits, to which lexically it bears the nearest affinity. The first person forms its plural in all the Dravidian idioms by changing the inflexion *n* into *m*, whilst the Prākṛits adopt *mhe*. But the Sinhalese use *pi*, a termination neither allied to the Dravidian, nor to the Prākṛit, nor indeed to the termination of pluralisation in the ordinary form of the North-Indian vernaculars. There is also this

difference to be observed between the Sinhalese *api* 'we,' and all the forms of the dialects above named,—that whilst the latter retain the primary consonant of the first person, the former gives it up altogether. Yet it will be observed that the Sinhalese is indebted for this *ap*, not to the Dravidian, but to the North-Indian ; e. g., the Murâthi and Gujarâthi *âpane* 'we.'

Now, *apane* in the dialects above named, one of the two pronouns for 'we'—that is, 'the party speaking, including those who are addressed,' whilst *hame*, the ordinary form, is simply 'the party speaking.' The existence of this two-fold form of the first person plural, in some of the North-Indian vernaculars has induced Dr. Stevenson, and several other scholars to class them with the Dravidian dialects, which also have this two-fold plural. Even with regard to those North-Indian idioms, the utmost extent to which an inference may be drawn from the above circumstance, is, that one class has borrowed an idiom of expression from the other; for the *words* which the Dravidians use are [*nâm* and *nângal*] different from those adopted by the North-Indians. When we turn from the North-Indian to the Sinhalese, we neither find two pronouns of the first person plural, nor the distinction sought to be conveyed by the adoption of two sets of words.\* The Sinhalese *api* means nothing more or less than what 'we' means in the English, or *nos* in Latin, or *amhe* in Pâli; and it clearly comes from *apane*, from the Sanskrit *dual* form *āvân*, the *v* being changed into *p*.

This *p*, or the entire inflexion *pane* must have originally had

---

\* "The existence of two pronouns of the first person plural, one of which includes the other excludes the party addressed, is a peculiarity of the Dravidian dialects, as of many of the Scythian languages; but is unknown to the Sanskrit and the languages of the Indo-European family,"—*Caldwell's Dravidian Grammar*, p. 36.

some significant meaning, for we find it in the *second person*, as in the first person plural.

Whilst we take the root *ta* 'thou,' it will be observed we add the same *p* in *api* to pluralize *ta*. The origin of *pi*, even if we disregard the Sanskrit *avān*, may, judging from the sense of duality which it was intended to convey, be traced to the dual terminations in *pi* and *pin*, Greek; *bhyām*, *bhis*, Sanskrit; and *bis*, Latin. The Notherners, who have no dual number, seem to have adopted this case-suffix, which so largely runs through several of the dual cases in the Sanskrit, to express the two-fold relation of the party speaking and the party spoken to; and it seems to be equally clear that the language which stands in fraternal connection with them, viz., the Sinhalese, was not so mindful of the distinction, and therefore adopted one or two pronouns used by her sisters, expressive of the plural pronoun for the first person.

It is unnecessary here to enter into the other terminations in the oblique cases of the pronouns of the first and second person, since they are the same as those to which we have referred under the declension of nouns; nor is it, for obvious reasons, necessary to go into comparisons of the *oku* 'he,' Sinhalese and *avan* Tamil; *moku* 'he [proximate]' Sinhalese, and *itan*, Tamil. Suffice it, however, to notice the form of the Tamil reflexive pronoun *tān* singular, *tām* plural 'self,' which may be traced to the *tama* and *tam-ai* in the Sinhalese. This may at first sight seem to be a Dravidian derivative; but there is no reason whatever to indicate why both the Tamil and Sinhalese forms might not have had their origin in the Sanskrit *ātman*. *Tam-ai* is used in the modern vernacular Sinhalese as in the Tamil to express a strong affirmation of 'self' or 'the very person' whom the speaker intends to single out as the man, as in, 'Thou; art *the man*;' but in the Sinhalese we use it as in the English with a verb. Thus what in Tamil would be expressed by *ni-tān* 'thou self' we would express in Sinhalese to *tam-ai* 'it is thou (very) self.' *Tān* in the Tamil must

therefore be regarded more in the light of a verb of affirmation, than as a pronoun. This appears to be the case when we examine another use of the expression which is identical in the Sinhalese: e. g., *mei tân* Tamil, *sebæ tam-a-i* Sinhalese, 'it is indeed true,' or ironically, *poi tan*, Tamil=*boru tam-ai* 'false indeed?' Sinhalese.

But whether we accept this (*tân=tama*) as a pronoun or a noun derived from the Sanskrit *âtman*, it may be affirmed that the only Sinhalese reflexive pronoun which the books adopt, and which the Dravidian dialects do not possess, is *siya*, from the Sanskrit *svayam* so near the Latin *sui*, *sibi*, and *se*.

The Sinhalese, like the Sanskrit, is devoid of a simple pronoun of the third person. The Sidatsangarâ gives *ê* (remote) and *mî* (proximate.) This looks like the Zend *hê*, and the Prakrit *sâ*, for *svê*; for the *s* is changed in our language, as in the Prakrits, to *h*, and that consonant is sometimes altogether omitted, leaving but the vowel which was inherent in the original word. The Sinhalese also possesses another word *ohu* for the third person singular. Its affinity to the Zend *hói*, to which, as pointed out by Bopp, the Greek *oi* is similar, is very clear. This pronoun, so different from the Tamil, is in common use amongst us, and may be traced to a variety of dialects. See *Caldwell's Dravidian Grammar*, p. 298.

The demonstrative bases in the Tamil seem to be *α* (remote,) and *i* (proximate;) e. g., *apporadu*; that time, ' *ipporadu* 'this time.' I shall here compare the Tamil demonstratives, with the Sinhalese, which bear some similarity in the sense in which they are applied although there is as much dissimilarity in their formation.

| Tamil.                 | Sinhalese.     |               |
|------------------------|----------------|---------------|
| A- <i>adu</i> (remote) | ê (remote)     | 'that'        |
| A- <i>van</i>          | é <i>kâ</i>    | 'that person' |
| A- <i>n-gu</i>         | e- <i>tena</i> | 'that there'  |
| A- <i>ndru</i>         | e- <i>dâ</i>   | 'that day'    |

Here the Sinhalese *è* is from the Bengâli *ê*; and the Tamil *α* as

well as the proximate *i* is more clearly allied to the Indo-European than to the Sinhalese and the North-Indian.

| <i>Tamil.</i>            | <i>Sinhalese</i> |              |
|--------------------------|------------------|--------------|
| <i>i-idu</i> (proximate) | <i>mè</i>        | 'this'       |
| <i>i-van</i>             | <i>me-kā</i>     | 'this one'   |
| <i>i-ngu</i>             | <i>me-tæna</i>   | 'this place' |
| <i>i-ndu</i>             | <i>me-dā</i>     | 'this day'   |

In the North-Indian dialects the radical *i* is used more systematically than the 'remote' *a*. In the Sinhalese, however, the personal pronoun *ma* is compounded with other words to convey the proximity to 'ego.' Here the word *ka*, compounded of *ê* and *mê*, is derived from the Sanskrit *kā=ekā*, 'one,' and comes from *eka*. So likewise *tæna* comes from *sthāna*, and *dā* from *dū*.

There is another demonstrative base which enters into an adverbial expression. It is *u* in Tamil, and *à* and *ara* in Sinhalese. Besides these, to which I have now referred, it would seem, the Dravidian languages have no pronouns, properly so called. \*

#### INTERROGATIVES.

I take the following comparative table of interrogatives from Caldwell, p. 344, shewing their Sinhalese equivalents.

|             | <i>Prox. i</i>      | <i>Remote. a</i>        | <i>Interrogative</i>   | <i>Sinhalese.</i> |
|-------------|---------------------|-------------------------|------------------------|-------------------|
| Mas. Sin.   | <i>ivan, htc</i>    | <i>avan, ille</i>       | <i>evan, quis?</i>     | ko (i)-(e) ká     |
| Fem. do.    | <i>ival, hac</i>    | <i>aval, illa</i>       | <i>eval, quae?</i>     | ko (i)-(e) kî     |
| Neuter do.  | <i>idu, hoc</i>     | <i>adu, illud</i>       | <i>edu, quid?</i>      | ko (i)-(e) ka     |
| Epicine pl. | <i>ivar, hi, hæ</i> | <i>avar, illi, illæ</i> | <i>avar, qui, quæ?</i> | } ka-vara         |
| Neuter do.  | <i>ivei, hæc</i>    | <i>avei, illa</i>       | <i>evei, quæ?</i>      |                   |

Though the Tamil presents a great similarity to the Latin in having as many demonstratives designed to express 'so many

---

\* All other words which correspond either in meaning or in use to the pronouns of other languages will be found on examination to be nouns regularly formed and declined. *Caldwell's Comp. Grammar*, p. 349.

relations as the above, yet it would seem that the latter have no more relation to the former than the Sinhalese have to the same. The interrogatives *kô-ká*, *kò-kí*, *koka*, *kavara* are all from the Sanskrit base *ka*, and are allied to the North-Indian. Although I have shewn an inanimate *kô-ká*, yet it must be remembered that this is a usage of comparatively recent times, for inanimate objects as I have shewn under the head of gender.

#### INSEPARABLE PREPOSITIONS.

If one circumstance, more than any other favors my position that the Sinhalese bears a close affinity to the Sanskrit, and is not allied to the Drâvidian, it is to be found in the unmistakable identity which may be established between the Sanskrit or Pâli, and the Sinhalese prepositions, none of which are known to the Tamil,\* or any other Dravidian dialect, except indeed what may be found in words which may be clearly traced to a Sanskrit origin. It would also seem that, except in a few instances, [e. g. *parâ-jaya*, etc.] these prepositions are used in the Sinhalese and in the later Sanskrit,† as *prefixes*, to qualify the sense of verbs, and are thence named *upa-sarga*.

The following is a comparative Table of Sinhalese, Pâli, and Sanskrit inseparable prepositions:—

| <i>Sinhalese</i> | <i>Pali.</i> | <i>Sanskrit</i> | <i>Examples‡</i>  |              |
|------------------|--------------|-----------------|-------------------|--------------|
| a                | à            | à               | <i>adara</i> ,    | 'affection.' |
| abhi             | abhi         | abhi            | <i>abi-seka</i>   | 'anointed.'  |
| ati              | ati          | ati             | <i>ati-sara</i> , | 'dysentery.' |

\* Wherever prepositions are used in the Indo-European languages, the Dravidian languages, with those of the Scythian group, use post-positions instead,—which post-positions do not constitute a separate part of speech, but are real nouns of relation or quality, adopted as auxiliaries."—*Caldwell's Dravidian Grammar* p. 35.

† See Professor *Monier William's Sanskrit Grammar* p. 316.

‡ The above examples are only given in the Sinhalese.

| <i>Sinhalese.</i> | <i>Pali.</i> | <i>Sanskrit.</i> | <i>Examples.</i>   |                    |
|-------------------|--------------|------------------|--------------------|--------------------|
| adhi              | adhi         | adhi             | <i>adikarana</i>   | 'supreme.'         |
| apa               | apa          | apa              | <i>apa-dan,</i>    | 'ab-lative.'       |
| api               | api          | api              | ' <i>pi-yana,*</i> | 'cover.'           |
| anu               | anu          | anu              | <i>anu-sara,</i>   | 'prevalence.'      |
| ava               | ava          | ava              | <i>ava-man,</i>    | 'dis-grace.'       |
| u                 | u            | ut               | <i>u-legi,</i>     | 'up-risen.'        |
| upa               | upa          | upa              | <i>upa-ma,</i>     | 'comparison.'      |
| du                | du           | dur              | <i>du-dana,</i>    | 'wicked.'          |
| ni                | ni           | ni               | <i>ni-dahas,</i>   | 'leisure.'         |
| pa                | pa           | pra              | <i>pa-vara,</i>    | 'pre-eminence.'    |
| pará              | pará         | pará             | <i>para-jaya,</i>  | 'de-feat.'         |
| pas †             | ni           | nir              | <i>pasa</i>        | 'to pass through.' |
| piri              | pari         | pari             | <i>piri-vara</i>   | 'retinue.'         |
| pili ‡            | pati         | prati            | <i>pili-gat,</i>   | 'accepted.'        |
| vi                | vi           | vi               | <i>vi-rida,</i>    | 'opposed.'         |
| sa                | san          | sam              | <i>sa-banda</i>    | 'con-joint.'       |
| su                | su           | sa               | <i>su-ratu,</i>    | 'very-red.'        |

## THE VERB.

In turning from the noun to the verb, Dr. Stevenson says, the second person singular in the imperative is the root in the languages which he compares, that is, the Dravidian, under which he includes the Sinhalese, and the North-Indian. I have already disposed of this supposed mark of resemblance under the head of roots. In further illustration of the facts therein stated, I may here refer to the verb substantive. This is changed from *bhū* in Sanskrit to *vū* in Sinhalese. The imperative in the latter is never *vū*, but *vē* or, more frequently (like the Sanskrit *bhava*==) *veva* 'be thou' singular, and *vevu* 'be ye' in the plural; see *Sidatsangarā*, § 51.

\* The initial *a* in *api* is generally lost in composition in the Sinhalese, as in *pi-nasa* 'nose-affection.'

† This is the only word, the relation of which to the Sanskrit does not clearly appear.

‡ Here, it will be observed, the Sanskrit *t* is changed into *l* in the Sinhalese.



It may be convenient here to notice the other verbal analogies to which Dr. Stevenson refers under the head of (1) Voices, (2) the formation of tenses, (3) the Participle, (4) the Infinitive, (5) Verbal nouns, and (6) the Relative participle.

#### THE VOICES.

*The Negative Voice.* Dr. Stevenson points out a *Negative Voice*, in the Dravidian as well as in the North-Indian dialects, but admits that 'to the observations under this head, the Sinhalese seems [it indeed is] an exception, having no affix which it adds to deny the existence of the act, beyond that which is known to the Sanscrit family of languages.'

To render this more plain :—The Dravidian dialects add a negative particle between the radical and the verbal theme, e. g. *var-á du*, 'do not come' ; whereas in the Sanskrit and the Sinhalese the mark of negation, generally *na*, is prefixed to the radical. Thus, *asti* Sanskrit, and *æti* Sinhalese 'it is,' become *násti* and *næti*, respectively in expressing 'it is not.'

Another peculiarity connected with the Dravidian negative verb, is, that it has but one tense, which is an aorist, or is indeterminate in point of time; e. g. *pogen* Tamil, 'I go not,' means either 'I do not go,' 'I did not go,' or 'I shall not go.' There is no such indefiniteness as to tense in the Sinhalese or the Sanskrit, in both which the tenses are regularly formed notwithstanding the negative affix; as *no-yami* 'I go not,' *no-giyemi* 'I went not,' and *no-yannemi* 'I shall not go.'

*The Passive Voice.* Many who have not thoroughly mastered the Sinhalese have laboured to shew that the Sinhalese language, like the Dravidian dialects, is devoid of a regular passive voice. This is as much a mistake as to suppose that it has not a relative pronoun, or an instrumental case. The mistake arises from a careless observance of our best writers, and too much adherence to the ignorant usage of illiterate men. I am free to confess that the

Sinhalese in their colloquial dialect make an effort to express themselves in the active rather than in the passive voice. It is also true, as stated by Dr. Stevenson, that they generally express themselves as in the North-Indian vernaculars, 'I ate a beating' instead of 'I was struck' This is after the fashion of the people with whom they had been, and from whom the Sinhalese were long ago separated. And the reason why the North-Indians have adopted this idiom may be found in the constant intercourse which they have had for centuries with their Dravidian neighbours.

Yet because a foreign idiom is adopted, or the Sinhalese shews a tendency to adapt itself to circumstances it must not be concluded that the language is destitute of a passive voice. It must moreover be borne in mind that in the particular investigation in hand it is not necessary to enquire what is the tendency of the Sinhalese at the present day—twenty-four centuries after it had been fixed in Ceylon—but what was its state, as to this passive voice, according to its earliest writings, its acknowledged grammatical system, and the learned usage in respect of it at the present day. There is scarcely a single Sinhalese book in which the passive voice is not unmistakeably expressed by its author. It is expressly treated of in the only ancient Sinhalese Grammar of authority, the *Sidat-sangarâ* ; it is found in writings contained in the Newspaper Press of this Island; and it is familiar to every one who reads his Lord's Prayer in Sinhalese.

But it is said that the word used is *læba* 'receive.' It signifies nothing what the auxiliary verb is that is employed to express the passive, so long as it conveys, when joined to the principal verb, which *læba* does, a passive signification. If exception be taken as I have seen it has been, that *læba* is by itself a separate word, what will the critic say to the verb substantive which enters into the composition of the English passive verb? What to the *ya* (from *ya* 'to go') which is added to the Sanskrit verb? Surely the one or the other of these is as much a distinct word and a verb

as *laba* or *lada*. Surely the addition of *be* in English or *ya* in Sanskrit does not divest the verb, to which they are added, of the passive signification which they impart. If not, it would seem that *laba*, from its very meaning of, 'passion,' 'endurance' or 'suffering' is calculated to make this voice more distinctly marked than either *be* or *ya*.

The formation of the passive voice in the Sinhalese is *two-fold*; one with inflexions, and the other with the periphrastic or auxiliary *laba*. The first may be regarded as the original form, and the second the form adopted to render the voice distinctly marked in such writings as paraphrases, *śāhās*, etc. Of the first see examples in all our ancient works; and the latter the reader meets in every modern writer. Now, the exceptional use of the active for the passive with a turn of expression does not shew that the Sinhalese is allied to the Dravidian any more than that the Dravidian exhibits a relation to the Semetic, from the resemblance which the one class bears to the other in the formation of roots [Cald. p. 160.] Even after the too general adoption of this form of expression, it will be found, we have not altogether ceased to use a *passive voice*: and I may indeed adopt the very language of Dr. Stevenson in 1843, a year after he wrote his Essay published in the Bombay A. S. Journal, and say "There is *undoubtedly such a thing as a passive verb* occasionally used [in Sinhalese as well as] in Murāthi; but its use is very limited, compared with that of the English passive verb, and its place is generally supplied by intransitive verbs, or by circumlocution.\*

There is also another peculiarity connected with the Sinhalese passive, or, as some call it, the *middle voice*, which may be noticed here. 'When' says the Sidatsangarā, 'the agent and the object are the same, (as when a thing is produced of itself,) the verb takes a pas-

---

\* Murāthi Grammar, p. 87.

sive termination.' This is of frequent use in the Sinhalese, as *gaha vatuni* 'the tree fell.'

The formation of the causal verb both in the North and South-Indian classes, is according to the Sanskrit. The *aya* in the latter is changed into *ay* or *ave* in the Prâkrit, into *va* in the Sinhalese and Murâthi,\* and *vi* in some of the Dravidian dialects.

#### CONJUGATIONAL SYSTEM.

*The present tense.*—The Sinhalese verb, like the Prâkrit, is formed by suffixing pronominal fragments to the root, as *kara* root 'do'; *kara-mi* 'I do.' As in the Dravidian, there is no sign whatever in the Sinhalese verb to indicate the gender of the third person. The pronominal signs are however in both suffixed, not prefixed. The Sinhalese has also of late years shewn a tendency, especially amongst the lower orders of the people, to divest the verb of all signs of personality, and to use it with a pronoun or a nominative. This is certainly not after the fashion of the Dravidian, nor from Dravidian influences; for the most ignorant Tamulian uses the verb with its proper personal inflexion. The use of the substantive verb, as an auxiliary in the formation of some of the tenses, is not known to the Sinhalese as it is to the Dravidian, and some of the North-Indian vernaculars. But these resemblances, and differences lead to no important results in the particular investigation before us. I shall therefore proceed to

*The Past Tense.*—Here again I may allude to what Dr. Stevenson has pointed out, under this head, as an analogy which pervades all the Dravidian, and the North-Indian dialects, viz: that the past tense of the verb is marked by affixes and not prefixes as in the Sanskrit. The Sinhalese is not without a prefix to form the past tense as *yami* 'I go' and *gi-ye-mi* 'I went'; but, I admit that the Sinhalese verb generally accords with the Dravidian in the

---

\* Dr. Stevenson's Murâthi Gr. p. 87.

peculiarity noticed by Dr. Stevenson. This admission however does not at all militate against the position, that the Sinhalese and her North-Indian sisters are indebted for this grammatical form to other than Dravidian influences. It is true that the Sanskrit takes the augment *a* in the [Hiyattani, Ajjatani, and Kâlatipatti] past tenses ; but the Pâli, which is the dialect which exhibits the nearest approximation to the Sanskrits, shows the earliest traces of a departure from this rule. For, on reference to *Kachchâyana's Pali Grammar* [lib. vi. chap. iv. § 38] it will be seen that this change of the present into the past by the augment *a*, is "optional;" e. g. *a-gamâ* = *gamâ* 'he went.' After the Pâli had taken this first step of departure from the Sanskrit the other Prâkrit dialects have followed the secondary formation of the Pâli preterite. See Vararuchi's Prâkrit Grammar, sec. viii. § 23. Not only they but the North-Indian Vernaculars have along with the Sinhalese, and some of the Indo-European languages \* followed the practice of retaining the radical without a prefix in the aorist, e. g. *amo*, *amavi*, Latin; *do*, *did*; Eng., etc., etc. Caldwell in summing up the relations which several languages bear to each other in the formation of the preterite, says 'In a large proportion of the verbs in the Germanic tongues, in the modern Persian, in the Turkish and Finish families of languages, in the vernacular languages of Northern India, and, with a few exceptions, in the Dravidian languages, the preterite is formed by suffixing to the verbal theme a particle, generally a single consonant only, which is significant of past tense.

*The future tense.*—The characteristic sign of the future in the Dravidian dialects is a *v* or *b*. The Bengali has also adopted a *b*, which Professor Max Muller identifies with the *b* or *be* 'which forms characteristic sign of the Latin future, and which is considered to be a relic of an old substantive verb.' Now the Sinhalese future has no sign in common with any of these languages. It takes

---

\* Caldwell, p. 391.

*nemi*, being simply an introduction of an *n* to the personal termination of the present tense.

*Participles*—On examination, I find a peculiarity which distinguishes the Sinhalese from the Dravidian Participle, viz., that the latter is destitute of what the former, in common with all the North-Indian and Indo-European dialects, possesses, the *verbal participle*, which participates in the nature of adjectives.\*

I may here notice another analogy in the formation of the *participle* to which Dr. Stevenson refers. He says that in the Sinhalese, Telugu, Carnatika, and Tamil.....the present participle active receives the signs of the persons as affixes, to form the present indicative. 'In the Northern family generally (he adds), I believe, as in the Hindi, and with a negative in Gujarathi, the present tense is formed by the participle and the substantive verb as in our form, *I am reading*.'

The sign of the Sinhalese present participle has indeed, apparently, a distant resemblance to the sign of the first person; but I feel persuaded that its formation is totally unconnected with the principle upon which the verbal termination in the first person of the indicative mood is formed. In the latter, the first person takes, as in several other languages, the pronoun for the first person, which is *me* in the Sinhalese; but the participle takes *mi*, which is the Sanskrit and the Pāli *māns* in the same part of speech. e. g. Gachchamānan, Pali and Sanskrit (neuter) 'going'; and this again is more like the termination in the English 'sing-ing,' or the Scotch 'sing-in.'

*The Infinitive*—Dr. Stevenson says that in the languages, whose agreement in grammatical forms he has noticed, the infinitive adopts the sign of the dative. So far as appearances go this is quite correct. If any inference can be drawn from this resemblance, it will be observed that the same inference may also be drawn as between all these dialects, and the English. See ante p. 57.

---

\* Caldwell's Dravidian Grammar, p. 384.

But, says Caldwell, 'the supposition that the final *ka* of most Tamil infinitives is in any manner connected with *ku*, the sign of the Dravidian dative and of the Hindi dative-accusative, is erroneous. A comparison of various classes of verbs, and of the various dialects shows that the *ka* in question proceeds from a totally different, origin.\* I am not prepared to state that in this I quite agree with Mr. Caldwell; but I do believe that the Sinhalese, in which we find, not a *ka* as already explained at p. 57, but, a *ka* both in the dative and in the infinitive, is not indebted to the Dravidian for the principle of this formation. It should however be borne in mind, that the analogy sought to be deduced is, not that the same form *ku* occurs in the dative and the infinitive of both the Dravidian and the Sinhalese; but, that though each uses different forms, yet each employs one and the same sign in the dative noun and the infinitive verb, thus establishing a common principle upon which the dative and the infinitive are formed in those languages. If this principle were recognized, we should indeed find no difficulty in tracing out the same analogies in languages belonging to the Sanskrit family. In the Sanskrit, as in the Sinhalese, the infinitive is ever to be received as the object of a verb expressed or understood. 'As the object of the verb,' says Monier Williams, 'it may be regarded as an equivalent to an indeclinable substantive, in which the force of two cases, an *accusative and dative*, is inherent.' Now in the Sinhalese the infinitive, as well as the accusative and the dative, take the same termination *ta*. The reason for the adoption of the same inflexion in the infinitive which occurs in the accusative and the dative is therefore obvious. The use of the infinitive, continues Professor Williams, as a substantive, with the force of the *accusative* case, corresponds to one use of the Latin infinitive; thus, *tat sarvām srotum icchāmi*, 'I desire to hear all that,' *id audire cupio*, where *srotum* and *audire* are both equivalent to accusative cases, them-

---

\* p. 423.

selves also governing an accusative. Similarly *roditum pravrittā* 'she began to weep;' and *mahā jetun ārebhe*, 'he began to conquer the earth,' where *mahājayan ārebhe* 'he began the conquest of the earth' would be equally correct.\* All that is here said of the Sanskrit equally applies to the Sinhalese: and, when we moreover learn from the authority already quoted, that 'infinitives in the Veda may also be formed by simply adding the usual case terminations,' we need no longer hesitate to account for the existence of the dative and accusative sign in the Sinhalese infinitive, and to trace its cause to the genius of that language, the Sanskrit, in which 'the infinitive most commonly involves,' as the Sinhalese does, 'a sense which belongs especially to the *Sanskrit dative* viz., that of the *end or purpose* for which any thing is done;' and in which, as in the cases above given, it would be equally correct to substitute the dative for the infinitive.†

There is yet another peculiarity, to which Dr. Stevenson has called attention, and which it is convenient to notice here. It is that of 'nouns being used with the verb' 'to do,' 'give,' 'take,' &c. This does not possess a characteristic by any means distinguishable from the Sanskrit. What is here described as *nouns* are verbal derivatives. Though they present all the appearance of nouns, yet they are deduced from, and are clearly traceable to, verbs; e. g., *horakan ālā* 'he made *steal*-ing.' Now, as remarked by Bopp, "the Sanskrit verbs of the tenth class, and all derivative verbs, periphrastically express the reduplicated preterite by one of the auxiliary verbs — *kri*, 'to make,' *as* and *bhū*, 'to be.'‡ E. g., *chora-yāncakāra* 'he made stealing.' The Sanskrit also uses 'go' as an auxiliary, as *vapushtamārtham varayām prachakramuh*, 'they went to a solicitation.' So likewise in the Sinhalese, as well as in

\* Mon. William's Sanskrit Grammar, p. 367.

† ib. p. 368; also Sidatsangara, § 30, p. 35.

‡ Also see Panini, iii. l. 35 seq.



other Indo-European dialects." See *Bopp's Comp. Grammar*, ii. p. 841, et seq.

So again in the Pali, as in the Rule, *bhu karâ sabba dhâtvaññesveva santi, tato setiti sayanan karotî yat ho\** i. e. *Bhu* 'be,' and *kara* 'do,' enter into the sense of all verbs; then *seti* 'he sleeps' has the sense of *sayanan karoti* 'he does the sleep.'

#### THE RELATIVE PARTICIPIAL ADJECTIVE.

Though the Sinhalese participles, both in the active and passive voices, materially differ as regards their inflexions and their formation from the Dravidian, yet a peculiarity has been pointed out with reference to their use, as shewing the affinity of those languages. It is this—that whenever practicable the Sinhalese as well as the Dravidians use, as adjectives, the relative participles of verbs in preference to nouns of quality, or adjectives properly so called. Now, the Dravidian dialects have no relative pronouns whatever, and it is on that account they resort to this, if I may so call it, make-shift, a 'relative participle'—a part of speech which is invariably followed by a noun, and which [when not understood] is preceded by the words or phrases which depend upon the relative. E. g., *vârum âl* in Tamil 'the coming person,' for 'the person who comes.' The Sinhalese and the North-Indian vernaculars, however, are not destitute of the relative pronoun. They have *ya, yah, yad*, 'who,' 'which;' and the same is clearly and distinctly found in the literature of Ceylon. In the *Pansiapanas Jâtaka*, in which the Translators have not disdained to use pure unadulterated Dravidian words and phrases, as already shewn, at ante p. 25, we find the relative pronoun as frequently as in any Sanskrit or Pali work. Here is an example. *Yam gasak mula sevane sâtapî yam-eh hunnevi nam e gusa attak vevai satpurusa tænætte no-bidineya*. 'If a person recline under the shade of a tree, even a branch of that tree does

---

\* *Bâlavatara*; also examine Prof. Mon. William's Sanskrit Grammar, p. 347.

not the righteous man break '—' The righteous man does not break even a branch of the tree, under *whose* shade he reclines.'

This form of the relative clause, though different from that in which it is expressed in the English, is nevertheless identical with that used in the Pali or the Sanskrit. It may be unsuited, or may, as remarked by a late writer, sound 'ludicrous' to the English ear; yet it must be remembered that it is peculiar to the idiom and usage of Sanskritic dialects. E. g. *yena Bhagavā [vihārī] tena rājā upasan-kami*, in Pali is equivalent to, *yam tēnaka Buduhu viśūda, etanata raja pæmtniyea* in the Sinhalese. 'Did Buddha dwell any where, the king arrived there.'

Though the existence of the relative pronoun in the Sinhalese is undoubted, and there is not a trace of it in any of the Dravidian dialects; yet the use of the relative *participle* is very frequent and even common in the Sinhalese as in the North-Indian Vernaculars. Caldwell thinks that this is 'through an under-current of Dravidian, or at least of pre-Sanskrit influences—p. 412. I am however inclined to a different belief, not only on account of the simplifying process to which all vernaculars resort, and the undoubted existence of the relative pronoun in the Sinhalese; but because the so-called *relative participle* is known to Sanskritic dialects and even the Sanskrit as much as to the Dravidian. E. g. *bhāsayantah bhānavah* 'brightening rays;' *avatarantan munin* 'descending sage;' *kriyamānan karma* 'being-to-be-made act,'—Sanskrit. The use of this relative participial adjective is the same in the Pali, the Sinhalese, the Greek, the Latin, and English. E. g. *Sakin vuttāni vachanāni*—*varak ki vachana*—*hapax legomena remata*,—*semel dicta verba*—'once spoken words.'

#### ADVERBS.

The Dravidian dialects have no adverbs at all; and as attempts have been made by some writers to shew that in this respect also the Sinhalese may be identified with the Dravidian, I annex the

following comparative statement to shew that the Sanskrit, Pali, and Sinhalese adverbs present no great diversity either in form, or in their use. For further examples I may refer the reader to the *Sidatsangarà*, *Appendix*, p. 170 et seq.

| <i>Sanskrit.</i>      | <i>Pali.</i>         | <i>Sinhalese.</i>   |                    |
|-----------------------|----------------------|---------------------|--------------------|
| <i>Mama puratas</i>   | <i>mama purato</i>   | <i>mā perata</i>    | 'before me.'       |
| <i>Adya gatah</i>     | <i>ajja gato</i>     | <i>ada giye</i>     | 'gone to-day.'     |
| <i>Saha nidrayati</i> | <i>saha nidayati</i> | <i>hā nidai</i>     | 'sleeps with.'     |
| <i>Att mahān</i>      | <i>attva mahā</i>    | <i>itā mahat</i>    | 'very great.'      |
| <i>Divā yāti</i>      | <i>divā yāti</i>     | <i>daval yayi</i>   | 'goes during-day.' |
| <i>Paschāt tāpah</i>  | <i>pacchā tāpo</i>   | <i>past tevilla</i> | 're pentence.'     |

It would thus appear that, whilst the Sinhalese is admitted by Dr. Stevenson himself to be an exception to *two* out of the *ten* Grammatical peculiarities which he has cited\* to shew a relation between the North-Indian and the Dravidian, there are, as already pointed out, five others [*e. g.*, as regards (1) the inflexion of nouns, (2) the interchange of the nominative and accusative cases, and the formation (3) of the imperative, (4) the present tense, and (5) the infinitive], which bear no analogy whatever to the Sinhalese; that the remaining three are secondary forms, which exist along with a primary Sanskrit form distinguishable from the Dravidian Grammatical system; and that *all* are traceable to Sanskrit influences. So much for the 'unequivocal proof' of lexical and grammatical analogies. I shall proceed to an examination in,

## SECTION FOURTH,

### OF SYNTACTICAL ARRANGEMENT.

I am not quite certain whether it is necessary to enter into the Syntax of the languages under consideration, which I have already partially done in the above submitted details, though, perhaps, not so methodically as I could have wished; but, since it

---

\* See Bombay As. Soc. Journal, vol. i. p. 106.

has been remarked by the same writer, to whom I have so frequently referred in the course of my remarks, Dr. Stevenson, that the general structure of all [the North and South-Indian dialects] is the same, and has certainly remained unaffected [by Brahmanical influences], a few remarks may not be deemed unnecessary.

Mr. Caldwell in summing up all the Syntactical differences between the Sanskrit family of languages and the Dravidian, says:—

“The situation of the governing word is characteristic of each of these families of languages. In Sanskrit and the Indo-European family it usually precedes the word governed: in the Dravidian and in all the Scythian languages, it is invariably placed after it; in consequence of which the principal verb always occupies *the last place in the sentence*. The *adjective precedes the substantive*: the *adverb precedes the verb*: the substantive which is governed by a verb, together with every word that depends upon it or qualifies it, *precedes the verb by which it is governed*: the *relative participle precedes the noun on which it depends*: the *negative branch of a sentence precedes the affirmative*: the noun in the *genitive case precedes that which governs it*: the *pre-position changes places with the noun and becomes a post-position* in virtue of its governing a case: and finally the sentence is concluded by the *one, all-governing, finite verb*. In each of these important and highly characteristic peculiarities of syntax, the Dravidian languages and the Scythian are thoroughly agreed.”—p. 36.

There seems to be some misapprehension here; for I cannot perceive so great a diversity, as here stated, in the construction of Indo-European and Dravidian dialects. I fail also to perceive much difference, in many of the particulars above stated, between the former and the Sinhalese. If the peculiar characteristic in the construction of a Dravidian sentence is, that the governing words are preceded by those that are governed, the Sinhalese, like some of her North-Indian sisters, is certainly an exception, in many respects, to the rule; and, where it is not, it

is indeed remarkable, that it accords with the Pali or Sanskrit on the one hand, or with the Latin or Greek on the other.

E. g., In the Dravidian as well as in the North-Indian dialects including the Sinhalese, the adjective precedes the substantive which it qualifies: so it does in Pali,\* Sanskrit, Latin, and English. 2.—The adverb precedes the verb: so likewise in Latin, and Pali. 3.—The genitive precedes its governing noun: so it does in Sanskrit. 4.—The relative participle precedes the noun on which it depends. Here the relative participial adjective is evidently meant, for there is no relative in the Dravidian dialects. In the use of the relative participial adjective not only the Latin and Greek, but the Pali and the Sanskrit are equally agreed with the Sinhalese.† 5.—The noun which is governed by a verb precedes the latter: so likewise in the Latin and Pali; 6.—The finite verb takes the last place in the sentence: so it does in the Pali and Sanskrit.‡ And 7, the negative branch of a sentence precedes the affirmative. This, I admit, is generally the case in the Sinhalese; but there are exceptions to the rule: and an exceptional rendering in one of the examples given below is not the less elegant on that account, like the English sentence—‘Not that I loved Caesar less—but that I loved Rome more.’

Let us, in the next place, examine these ‘highly characteristic peculiarities’ of construction in Dravidian dialects, with reference to the Syntax of a Pali, as compared with a Sinhalese, sentence. If, by such comparison I can shew that the Sinhalese approaches very nearly to a very ancient type of the Sanskrit, of undoubted Northern origin, I believe it will be unnecessary to examine the construction of the Dravidian. Proceeding therefore

---

\* Agahita visesana buddhi visessamhi na-uppejjatiti visesanam pubben hoti —*Bala-vatara*. i. e. ‘The mind unembued with the attribute comprehends not the substantive: wherefore the adjective precedes (the noun).’

† Vide supra, p. 77.

‡ Vide remarks infra.

to the comparison of the Pali and the Sinhalese, I shall divide my observations into three classes: *first* their lexical, *secondly* their grammatical, and *thirdly* their syntactical analogies.

*Pali*.—Tissadatta thèro *kira* Bòdhi mande suvanna salàkan gahetvā atthàrasasu bhāsasu katara bhāsāya katēmi-iti pavāresi.

*Sinhalese*.—Tisdāt tera *vanāhi* Bòdi mandapē suvarna (or *ran*) salākāva gena dāha-āta bāsāven kavara bāsavakin katā karam-dēyi pæverī.

*English*.—‘Tissadatta therā having taken up the gold broomstick in the Bô-yard, requested to know in which of the eighteen languages he should speak.’

i. Here are fifteen words, of which two alone cannot be traced to the Pali. They are *vanāhi* and *dēyi*, both indeclinable particles. Of the others, all which are independent of the Dravidian, *savarna* is nearer Sanskrit than the Pali. It is true that the ancient Sinhalese word for ‘gold’ is *ran*, different from the above; but even that word is clearly a derivative of the Pali *aranna*.

ii. Though the Sinhalese nominative *a* in *tera* is distinguishable from the Pali; yet the Pali locative *e* in *mande* is the same as in the Sinhalese. The similarity in the termination of the verb in the third person singular ‘pavāresi’ is obvious. The only difference in the grammatical construction of the two languages, as exhibited in the above versions, is that the Pali locative *bhāsasu*, is expressed in the Sinhalese by the *ablative*. I have followed the modern usage with a view to exhibit the difference between it and the ancient, which, as we find from the *Amāvatura* and *Pradīpikāva*, preferred the locative. The locative if used in the Sinhalese would not be less elegant than the ablative.

iii. Syntactically, it will be observed that every word in the Sinhalese takes the same position which it occupies in the Pali. The nominative is the first word in the sentence; the adjective precedes the substantive; the accusative *suvanna* precedes the past participle *gahetvā*, which it governs; the locative *mande*

takes the precedence of the accusative; and the finite verb is placed last in the sentence.

*Pāli*—*Tan pana tena atthato uggahetvā pavāritan; na-paṭisaṃbhidāya ṭhitena; sohi mahā pannaṭāya tan tan bhāsan kathāpetvā ugganhi: Tato uggahetvā evan pavāresi. Bhāsan nāma satta ugganhanṭi vutvācha panettha idan kathitan, Mātāpitārohi daharā kāle kumārake manchevā pithevā nipajāpetvā tan tan kathaya mānā tāni tani kicchāni karonti; dārakā tesan tan tan bhāsan vatthāpentu 'iminā idan vuttan, iminā udā vuttan '-ti gacchante kāle sabbampi bhāsan jānanti.*

*Sinhalese*—è vanāhi artayen igena pavarana-ladi; pilisimbiyāvehi sitiyan-visin *nove*; hetema mahapæna-vat bævin è è basā kiyavā ugatī: *ehēyin* igenmehi sita mesé pævarī. Bāsā nam satvayō iganaganityayi kiyāda vanāhi mehi meya kiyana-ladī. Mavu-piyō vanāhi ladaru kala kumarun messēho putuvēho hovā è è\* [bas] kiya-min è è katayutu kara-ti; ladaruvo *ohunge* é é bas—'meyin meka kiyana-ladī meyin meka kiyana-ladæ'-yī *niyamakaraganiti*: *kal-yāmen* † siyalu-ma basāva daniti.

*English*—'He so (spake) from (a knowledge of the languages) acquired by actual study—not through inspiration. For, being a very wise personage he knew those several dialects by learning: wherefore, being one of (such) acquirements, he so inquired. This is said here (to illustrate) that men acquire a language (by study). Parents place their children, when young, either on a cot or a chair, and speak different things, and perform different actions. Their words are then distinctly impressed on the children (on their minds, thinking,) that such was said by him, and such by the other; and in process of time they learn the entire language.'

i. Here *paṭisaṃbhidāya* Pāli, = *Pilisimbiyāvehi*; 'inspiration': *sohi* has not produced *hetema*, which comes from he='that,' 'he'

\* Yamak yamak would be better.

† I have put this in the ablative, but the locative may be elegantly used as in the Pāli.

and *tema* 'self' as the sign of the nominative. The nearness of signification and form of *uggahethatva* to *igenmehi-sita* is remarkable; also of *nāma* and *nam*; and of *kāle* and *kala*. Here is an illustration of the Sinhalese words *maru-piya* for 'father' and 'mother,' being of Sanskrit origin. No Sinhalese scholar, I am persuaded, will introduce into the above sentence *appā* or *ammā*, any more than an English writer would 'papa' or 'mamma.' The Pali *dahara* and the Sinhalese *la-daru* are synonymous, the *la* being in the latter added to mark the 'tenderness' of the infant. The Pāli *ti* is expressed by the Sinhalese *yī*, and in the use of them there is not the slightest difference. Again there is not a single word, in the above sentence, which has the most distant relation to the Dravidian.

ii. The Sinhalese auxiliary *artayen* is expressed *atthato* in the Pāli. The passive voice is here undoubtedly expressed by *para-rana-ladī*, and *kiyana-ladī*. There is, moreover, no grammatical form that may be pronounced to have had its origin in the Dravidian.

iii. In rendering the above Pali passage into the Sinhalese, idiom has rendered the displacement of only two words. One is the negative particle *na*, which, in the Pali, is prefixed to *pati-sambhidāya* when the verb is understood, but which in the Sinhalese should be added to the verb substantive which is generally expressed. The other is the principal verb *vavatthāpentu*—*niya-makara-ganiti*, 'determine,' which in the Pali precedes the quotation following, but which in the Sinhalese follows the passage expressed as the thought that is passing in the children's minds. Adverting to the only remaining analogy to which Dr. Stevenson refers,—that in the Dravidian dialects 'the verb is used, *last* in the sentence,' I may remark that the difference here between the Pali and the Sinhalese is, that contrary to the position of the verb in the first example, the Pali finite verb in example second does not occupy the last place in the sentence, whilst the Sinhalese verb



does. As already remarked it is a mistake to suppose that this is at all a characteristic which distinguishes the Sinhalese from the Sanskrit; for in the latter, as stated by Professor Monier Williams (See his Grammar p. 348) 'the verb is *commonly*, though not always, placed *last* in the sentence.'

Such is the evidence which I promised to adduce; and so far as historical testimony, lexical, grammatical and syntactical *analogies* go, I believe I have supported my position with the 'unequivocal testimony' which others have claimed for a contrary theory. Doubtless there are few Dravidian words and Grammatical forms to be found in the Sinhalese; and these, which, like the oases in the desert, are few and far between, I have not failed to point out. But, which is the *confessedly* Sanskritic dialect that has not departed more than the Sinhalese from its parent stem? In order to establish an original identity between two dialects it is not essential that there should be a resemblance in all their words and Grammatical forms. 'Philology (says Bopp) would ill perform its office if it accorded an original identity only to those idioms in which the mutual points of resemblance appear everywhere palpable or striking; as, for instance, between the Sanscrit *dadāmi*, the Greek Lithuanian *dumi*, and Old Slavonic *damy*. Most European languages, in fact, do not need proof of their relationship to the Sanscrit; for they themselves shew it by their forms, which, in part, are but very little changed. But that which remained for philology to do, and which (he adds) I have endeavoured to the utmost of my ability to effect, was to trace, on one hand, the resemblances into the most retired corners of the construction of language, and, on the other hand, as far as possible, to refer the greater or less discrepancies to laws through which they became possible or necessary.'

In the comparisons, however, which I have instituted, it was even unnecessary to resort to the 'most retired corners' here spoken of. For, the resemblance which the Sinhalese bore, both

lexically and grammatically, to the Pâli, and therefore to the Sanskrit, has been found to be so 'palpable and striking' that their relationship appeared at once to be even greater than that between the Sanskrit and the Indo-European dialects. I am fully persuaded that no one, who has followed me closely through the investigations which are here submitted, could fail to notice that the prominent features of the Pali are indelibly impressed upon the very face of the Sinhalese, and so clearly, that it is impossible to deny to them the affinity of mother and daughter. But whether their relationship is so close or more distant, the points of resemblance which I have exhibited between some of the North-Indian vernaculars (so entirely different from the Dravidian), and the Sinhalese, especially in the case of Pronouns, see p. 63; and the still closer resemblance which the Sinhalese bears to the Pali, when compared with the North-Indian dialects, must satisfy any candid mind that the Sinhalese had at one time a local existence in the North of Hindustan, and that her early separation from her Sisters, combined with the help which Pali literature has rendered her, on the one side, and on the other, the implacable hatred of our forefathers towards their Dravidian neighbours which induced her to repel their advances, has enabled her to live upwards of two thousand years without those material changes which her Hindu Sisters have undergone. Indeed, I may remark in conclusion, with far less weighty evidence, than I have adduced, did Professor Max Muller† lay down his brief, and leave his case in the hands of an English Jury, confident of their verdict as to the relationship of the Hindu, Greek, and the Teutonic. With, however, the venerable authorities which I have cited, the overwhelming results of the cross-examination to which I have subjected the witnesses on the opposite side, and the

---

\* Professor M. Williams's Sanskrit Grammar, p. 348.

† Ancient Sanskrit Literature, p. 11.

very strong and irresistible testimony which the Pâli has borne in favor of its relation to the Sinhalese, I believe I have a right to expect that the same English Jury will give their verdict in my favor; and that they will, without retiring from the jury-box, pronounce that ' THE SINHALESE IS A SANSKRITIC, NORTH-INDIAN,—NOT A DRAVIDIAN—DIALECT.

---

**BUDHISM:—***A Lecture delivered before the Colombo Young Men's Christian Association; by the late REV. D. J. GOGERLY.—With Introduction by the REV. JOHN SCOTT, and Notes by the REV. D. DE SILVA.*

---

IN a recently published essay on Buddhism, Professor Mux Müller after referring to the Pali studies of the late Mr. Turnour says, "The exploration of the Ceylonese literature has since been taken up again by the Rev. D. J. Gogerly, whose essays are scattered about in Sinhalese periodicals and little known in Europe." Mr. Gogerly devoted a great part of the labour of forty years to researches in Buddhism as set forth in the original Pali works, and the results of his investigations cannot fail to be of value to the students of a religion which is professed by nearly one third of the human race. The following lecture, delivered in Colombo shortly before Mr. Gogerly's death, contains, it is believed, the latest and most comprehensive account published by him of this strange oriental system of mingled religion and philosophy.

There are some of the lecturer's conclusions to which it may be desirable to attract attention. For instance, a question much agitated some years ago was, which was the earlier system, Brahmanism or Buddhism? It will be seen Mr. Gogerly holds the opinion now generally entertained, that Buddhism was a reaction against the abuses of the Brahmanical system. The second paragraph of the lecture refers to Goutama's statement that many preceding Buddhas had existed;—possibly some of his doctrines had been

taught by more ancient sages, and this fact may have been exaggerated into the notion of the Buddhas of preceding calpas.

A considerable part of the lecture is occupied with Buddha's description of the material universe. This is the weak point of Buddhism, which is thus placed in antagonism to the most obvious teachings of science. These statements are no mere allusions to the popular belief of that period; they are positive and detailed affirmations made by Buddha on the authority of his omniscience. To escape from the difficulty, an ingenious attempt was made a few years ago to prove that these accounts of the universe were to be understood in an allegorical sense. Mr. Gogerly however, in his *Christiani Pragnyapti* demolished this explanation, shewing that what Buddha taught concerning the world was intended by him to be believed literally, as an essential part of his religion. Thus the states of reward and punishment are assigned to definite localities in the universe, so that if (for instance) Maha Meru is allegorical, the heavenly worlds on the sides and summit of Maha Meru must be allegorical also.

Probably the chief novelty in the following lecture will be the representation it gives of Buddha's doctrines as to a Creator. The usual opinion of persons acquainted with Buddhism has been, that the existence of a Supreme Being was neither affirmed nor denied in this system, the subject being simply ignored by Buddha. This however was not Mr. Gogerly's view. He held that the idea of a Supreme and Infinite Creator was familiar to the mind of the founder of Buddhism, and deliberately rejected by him. Some curious extracts on this subject will be found in the lecture.

There are three doctrines closely connected together and singularly characteristic of Buddhism. These doctrines relate to the nature of man, transmigration, and Nirwana. On each of these points Mr. Gogerly's Pali studies led him to conclusions which are clearly stated in the following lecture. First—Buddhism denies the existence of a soul in man; therefore,—Secondly, there can be no transmigration, in the popular sense of the term—there is only a series of beings—the later beings in the series inheriting the merit or demerit of the earlier beings. Thirdly—Nirwana is no Paradise, for when the series of sentient beings comes to an end there is no soul to continue. Nirwana therefore is simply extinction. This is the view of Nirwana held by the highest authorities on Buddhism; and it will be seen that the independent investigations of Mr. Gogerly caused him to arrive at the same conclusion.

The notes are written by the Rev. David de Silva of the Wesleyan Mission. He was formerly a student of Mr. Gogerly, and has acquired an extensive knowledge of the Buddhist Scriptures in Pali.

---

**BUDHISM**, which was once the dominant religion of India is now completely unknown in its native country; but when excluded from that region it spread itself in other directions, and at present prevails in Nepaul, Thibet, China, Burmah, Siam, Ceylon and other countries, and numbers among its votaries a large portion of the human race. (1.) Brahmanism certainly prevailed extensively at the time

---

(1.) The Right Rev. P. Bigandet, in his preface to the first edition of the "Life or Legend of Gotidama," says of Buddhism, "that in our own days, it is, under different forms, the Creed pre-

when Goutama Budha was born, for upon his birth Brahmins were consulted respecting the fortunes of the new-born prince (2.); and it is stated that the progress of Buddhism was most rapid among the inferior castes: the Kahatriya or Warrior tribe rejecting it from the pride of birth, and the Brahmins from the pride of learning: but the Brahmanism of that period differed materially from that of the present time; no trace appearing in the sacred books of the Buddhists of the worship of Siva and Vishnu. The God to whom offerings were generally made, was Agni, the God of fire. (3.)

vailing in Nepaul, Thibet, Mongolia, Corea, China, the Japanese Archipelago, Anam, Cambodia, Siam, the Shan States, Burmah, Arrecan, and Ceylon."

Sir Emerson Tennent's Christianity in Ceylon, page 199, tells us the followers of Buddhism amount to more than one-third of the human race. Hardy's Eastern Monachism says, "It is computed there are 369,000,000 of Buddhists." \*

(2.) On the birth of Siddharta, 108 Brahmins were brought together, of whom there were eight chiefs; seven of these having observed the 32 attributes of personal beauty in the prince, lifted each two of their fingers, and pronounced, that if he remained a laic he would be universal monarch; if he turned priest, he would become Buddha සච්ඡෙතාරං චස්සසති රජසොති චක්කවත්ති සංථමස්සති බුදො භවිස්සති Saché agáran wasissati rájá hoti chak-kawatti. Sache pabbejissati buddhobhawissati," while the youngest Brahmin කොන්දායා Kondanya positively affirmed, that he would not remain a laic but would become Buddha, and lifted up one finger in token of this. (Manorathepurane ෩)

(3.) Professor Wilson, on Rig Veda Sanhita, affirms, that there

\* Max Muller in his Essays on the Science of Religion, p. 214, says that Goutama "became the founder of a religion which after more than 2000 years, is still professed by 455,000,000 of human beings." He adds however the following note: "Though truth is not settled by majority it would be interesting to know which religion counts at the present moment the largest number of believers. Berghaus in his 'Physical Atlas' gives the following division of the human race according to religion.

|                                |                                  |
|--------------------------------|----------------------------------|
| Buddhists . . . 31.2 per cent. | Brahmanists . . . 13.4 per cent. |
| Christians . . . 30.7 "        | Heathens . . . 8.7 "             |
| Mohammedans . . 15.7 "         | Jews . . . 0.3 "                 |

"As Berghaus does not distinguish the Buddhists in China from the

The state of caste at that time was also different from that which prevails at present, the Warrior tribe being regarded as the first, and the Brahmanical as the second in the scale of dignity. Many princes having embraced the doctrines of Buddhism, the Warrior tribe became its supporters, but were ultimately subjected by the ascendancy of the priesthood. Much obscurity rests upon that historical period which we shall not attempt to remove; confining ourselves briefly to the doctrines of Buddha as recorded in their sacred books.

Although the present system of Buddhism is of comparatively recent origin, Goutama affirmed, that in the most remote ages the doctrines which he taught had been proclaimed by an incalculable number of Buddhas who lived in previous kalpas; as well as by three who preceded him in the present kalpa. The doctrines taught by them are represented as being identical with those of the present Buddha. (4) The whole field of truth is stated to have been open before each Buddha, who is therefore named සබ්බසැද්දා, sabannnyu, omniscient; චක්ඛුමා chackhuma, the

---

is no reference in the Vedas to Trimurti, Brahma, Vishnu and Siva, to Durga, Kali, or Rama, or to any other of the gods that are at present the most popular in India. The principal deities are Agni and Indra.

(4.) When the priests of Buddha were assembled in the sitting hall of Karéru in the garden of Anathapindikā at Jetāvāna near Sāvattī, they were anxious to be taught respecting the former states of existence. Buddha addressing them, says, that 91 kalpas previous to his time there appeared a Buddha whose name was විපස්සි Wipassi; 31 kalpas previous, there was one සිකි Sikhi; in

---

followers of Confucius and Laotse, the first place on the scale belongs really to Christianity."





the Christian era. His father was a sovereign prince named Sudhodana. (6.) He was called the Prince Siddharta, and lived in regal splendour till his 29th year. About that time he became disgusted with sensual pleasures ; considered the circumstances of disease, decrepitude and death, and being desirous of obtaining deliverance from the continual reproduction of existence, embraced the life of an ascetic and retired to the wilderness. His object appears to have been twofold: 1st, To obtain that complete freedom from the passions and affections which would ensure the entire cessation of his own personal existence : and 2nd, That he might attain to that perfection of wisdom and knowledge which would enable him to teach others the paths of perfect liberty. For this purpose, during six years, he performed painful penances, and his abstinence from food was such that his body was reduced to a skeleton ; and, completely exhausted, he fainted and was regarded by his associates as dead. He however revived, and finding no advantage from this course of life he abandoned it, and took the sustenance necessary for the restoration of his bodily strength, and with renewed en-

---

pajāya sadewemanussāya anuttaran samma sambhodin abhisambuddho patinyāsin.—O priests! when my perception, relative to these four grand truths, which are threefold, and therefore of twelve kinds, was perfectly clear, then, O priests, I knew I had acquired the most complete and perfect wisdom attainable in the universe, including the human, heavenly and Brahma worlds.”

In the Aggappasādana Suttan, Buddha is said to have had no preceptor පූර්වෝක්තොක්තී නමේ áchariyó atthi.

(6) In the Mahápadāne Suttan, Buddha says “මය. භික්ඛවෙ ඵෙතර්භික්ඛබොදොනාමපිතාභ්‍යොති මායාදෙවී මාතා ජනෙතී කපිලවතට්ඨි නගරං ගුරුදෙවී Māyan Bikkhawé éterahi suddhódanó nāme pitá abhósy máyá déwi mātá janetty kapilawatthu naganaran rájadhánithi.—Priests! my father's name was Suddhodano, Queen Maya was my mother, Kapilawatthu was my native city.”

ergy bent his mind to intense meditation. (7.) This profound meditation is termed *Jhàna*, and while the devotee is engaged in these exercises he becomes insensible to all external things: he can neither see, hear, nor feel, but is in a state something similar to that which is called the mesmeric trance, and no means exist by which he can be aroused from this state until the meditation is ended. (8.) Budha states to the Brahmin Weranjo, that he, being persevering, tranquil in body and mind, pure in heart and free from all sensuality, engaged in examination and research on the nature of things, and thus enjoyed the first *Jhàna*. Investigation and research being terminated, with a tranquil and self-concentrated mind he enjoyed the serene pleasure of the second *Jhàna*. Free from the disturbances of pleasure, thoughtful and wise, and healthy in body, he enjoyed the third *Jhàna*, called the state of thoughtful contentment. Free from the emotions of joy or sorrow, previous exultation and depression being removed, with a contented and holy mind he attained to the 4th *Jhàna*, being unmoved either by pleasure or pain.

Being thus mentally tranquil, pure and holy, free from passion or pollution, he recalled to mind former states of

---

(7) It is no peculiar prerogative of the Buddhas to attain to the *jhāna*: Brahmins, ascetics, as well as priests, may exercise these meditations (See *Sāmanyaphala Suttan* in the *Digha nikāya*.)

(8) In the *Parajika* section of the *Winnaya Pitaka* we find, that when Buddha was once residing with 500 priests, in the city of Weeranja, not far from the tree ပုဗ္ဗိမာဏာ Puchimanda Margosa, which was the residence of a demon named နာလိက Naléri, he gave to Brahman Weeranja the order in which he had overcome sensual gratification and exercised the *Jhāna* meditation. The *Jhānas* are four; first, second, third, and fourth. Buddha had not only exercised these profound meditations and attained to all the

existence through many calpas, together with their causes and circumstances.

He then with a clear and godlike vision, transcending that of men, beheld Beings dying or being born, noble or base, beautiful or deformed; marked their conduct and its results. Having thus attained to a high degree of wisdom, he afterwards ascertained the causes of sorrow and continued existence, and the mode in which the series of existence and the wretchedness connected with it might for ever cease. When he had obtained this knowledge he became a Budha, perfect in wisdom, purity and knowledge, and the chief of all existing beings from, the highest Brahma world to the lowest hell; rendering honor to no one as his superior, but being worthy of receiving supreme honor from all.

We shall now briefly notice his teaching relative to the system of the universe, embracing its inhabitants; and afterwards consider his metaphysical and moral doctrines.

---

four, but he had also acquired the three විජ්ઞා Wijjā. In this he had succeeded during the same night; he sat down at the foot of the Bo tree determined to become Buddha; the night was divided into three watches. During the first watch, he recalled to mind previous states of existence; one state of existence, two states born in such a place, having such a name, such a tribe, and so on to thousands of births. During the second watch he beheld beings dying, existing, and so on. During the third watch, at the time of dawn, he attained the third Wijjā, by which he was not only freed from passion, but also obtained the knowledge of the four grand truths: 1, දුක්ඛ Dukkha—That every existing thing is a source of sorrow: 2, සමුද්ද Samuda—That continual sorrow results from a continual attachment to existing objects: 3, නිරෝධ Nirodha—That a freedom from this attachment liberates from existence: and 4, මග්ග Magga—The path leading to this state. The action of the විජ්ઞා is compared to the action of a chicken, which by successive operations cleaves the shell and comes forth “*කුකුළු විජ්ઞා පකෂසචි අශ්වකො සමිතා Kukktachchāpakasséwa andak-kúsamháty.*—As the chicken from the egg.”

Budha does not attempt to account for the origin of existing beings : he says " Bikhus, the initial point of the series of transmigration is not known: The commencement does not appear." (9.) He therefore confines his teachings to the system as it is during the present calpa. The duration of a calpa he does not arithmetically define, but uses a

(9.) පුරිමාතික්ඛවෙකොවි නපඤ්ඤායති. Purimá bikkhawé kóti napanyayati.—O Priests ! the commencement does not appear."—Mahanidhána sutta wannená.

The recital of Buddha's own abstruse meditation and attainment to the Wija form a very favourite part of his sermons—not many discourses can we turn over without finding them alluded to. These are his words. සොඛො අනංවුතමණ් විවිච්චවකාමෙතිවිවිච්ච අසුඤ්ඤාති ධම්මෙති සවිතකකා සවිචාර. පිචෙකප. පිතිසුඛං. පඨවප්ඤ්ඤා නං උපසම්පජ්ජවිතාසිං, විතකකවිචාරණං. චූපසො අප්ඤ්ඤාතං. සමාසං අනං. වෙතසො එකොදි තාවං අවිතකකා අවිචාර. සමාසිප්. පිතිසුඛං. දුතිය ප්ඤ්ඤාතං. උපසම්පජ්ජවිතාසිං. පිතියාවිචාරානා උපෙඛෙකොවිතාසිං. සො ච සම්පජ්ජනො සුඛං ච කායෙතප්පිකං. වෙදෙසිං. යනං. අරියානං චිත්තවත්තං උපෙඛෙකො සතිමා සුඛවිහාරිතීතියප්ඤ්ඤාතං. උපසම්පජ්ජවිතාසිං. සුඛස්ස ච පහානාදුක්ඛස්ස ච පහානාපුබ්බෙව සොම තස්ස දෙවනස්සානං. අත්තස්ස මා අදුක්ඛං. අසුඛං. උපෙඛෙකො සතිපාරසුඤ්ඤා චතුත්තරිකානං. උපසංපජ්ජවිතාසිං. Sôkharâhan brâhmanâ vivichchêve kâméhi vivichcha akusâlêhi dhammehi savithakkan savichâran vivékijjan péthesukhan patamajjhâna upasampajja vihásin—vithakka viehâranan vupasama ajjhatthan sampasâdanan chéthasso ékôdibhâvan awithakkan awichâran samâdhiijan péthisukan duthiyajjânan upasampajja vihásin péthiyâchawirâgâ upékhâkôcha vihásin sathôcha sampajjâno sukhancha kâyéna patisanwedésin yanthan ariya âchikkhanthi—upekhakho sathimâ sukawiharithi tathiyajjhanan upasampajja vihasin—sukasascha pahânâ dukkassascha pahânâ pubbéwe sómenasasa dhomanassânan aththagamô adukkhan asukhan upékhô sathi pârisuddhin chathaththajjânan upasampajja vihásin." (see the English in the lecture pages 94-5. (Pârâjika Bhayabherewe Suttan; Majjhimânikâya; Sangarawa Suttan, or Chulahatthidopame Suttan, &c.)

The effects of the Jhânas are stated in the following terms: පඨවප්ඤ්ඤාණං භවිරණකවාටකං. උසො ආලෙභි දුතියප්ඤ්ඤාණං විතත්ත විචාරනදුඛං. වපසලෙභි තතියප්ඤ්ඤාණං පිති. විතලෙභි චතුත්තරිකාණං සුඛදුක්ඛං. පහායති." Patamajjhânéne Nêewarâna kawâtakan ngghatêti Dutiyajjhanéne Witakkawichâranadhûman.

similitude: If there be a solid rock forming a cube of a yodun (about 14 miles) and a delicately formed shawl (10) should brush against it once in 100 years, the rock by the contact would be gradually worn away: but the calpa would not in that time be completed. All large measures of length are computed by yoduns: thus 4 singhalese ගැටැක්කම hetekma, or miles form a gow, or league, and as the hetekma is less than an English mile, the gow or league may be about  $3\frac{1}{2}$  miles; 4 of these, or about 14 miles, constitute a yodun. (11.) The universe comprises an infinite number of systems or Sakwalas: each complete in itself, having its own sun, moon and stars, and its own heavens and hells. (12.) The Sakwala with which we are connected is surrounded by an immense rocky circle, which is in height 82,000 yoduns or more than

Wapasaméti, tatiyajjhánéne, pítin wirájéty. Chatuttajjhánéne Sukha dukkhan paháyati." The first Jhána elevates the window of mental impediment; the second Jhána calms the smoke of investigation, and research; the third Jhána frees from pleasure; and the fourth Jhána removes both pleasure and pain. (See Sumangala-wilásiny @ and Manórathepóóreney.)

(10.) "There is a species of cloth, fabricated at Benares of the cotton that is unequalled in the delicacy of its fibre. Its worth, previous to its being used, is unspeakable; after it has been used it is worth 30,000 බැට්ටන්වැටුප් nilakarshas (of the value of 20 or 30 small silver coins) and even when old it is worth 12,000 karshas. Were a man to take a piece of cloth of this most delicate texture, and therewith to touch in the slightest possible manner, once in a hundred years, a solid rock, free from earth, a yojana high, and as much broad, the time would come when it would be worn down, by this imperceptible trituration, to the size of a mung or undu seed. This period would be immense in its duration; but it has been declared by Buddha that it would not be equal to a Maha Kalpa." (Manual of Buddhism, page 1.)

(11.) As to the exact size of a yojana it is not agreed. It is more than 10 and less than 16 miles; 14 miles is the nearest.

(12.) Goutama does not directly teach Physical geography, but in defining certain expressions we are able to gather his views on



in diameter. In the midst the mountain Maha Meru is situated. This mountain Budha states, in the sermon on the rising of seven suns, is 84,000 yoduns in length, 84,000 yoduns in breadth, 84,000 yoduns in height above the sea, and 84,000 yoduns beneath its surface. (14.) It is surrounded by seven circles of rocks, each circle being half the height of the preceding one, (15,) commencing with Maha Meru and

වෙනි. සර්වඥයා. දසවටසතසානි අභිච්ඡිකානි නානිව ékan chakkawālan áyámáthó withtháarithócha yojanānan dwádasasathasahasāni chathutthinsa sathānipayasancha yōjanāni parikképathó. Sabban sathasahasāni chatthinsa parimandalan dasachéva sahasāni adduddāni sathānicha. "Each sakwala is 1,203,450 yojanas in length and breadth. In circumference 3,610,350" (see also comment to the Winnaya.)

(14.) See Anguttara Nikāya, 7th Nipáta සිතෙර, භික්ඛු චූළක රාජා චතුරාසිති යොජන සතසසානි අයාමෙන චතුරාසිතියාජන සතසසානි විමාරෙන චතුරසිතියොජනසතසසානි මහාසමුද්‍රාදර්ශනාලොකා චතුරසිති යොජනසතසසානි මහාසමුද්‍රාවට්ඨානො, Sineru bhikkawé pabbetharājā chaturāsiti yōjanasahasāni áyáména chaturāsiti yojanasahasāni withtháréna chaturāsiti yojanasahasāni máhā samuddé ajjho galho chaturāsiti yojanasahasāni máhā samuddā atchuggatho (also Wisuddhimagga, comment on the Winnaya). "Priests the great mountain Sineru is 84,000 yōjanas in length; 84,000 yojanas in breadth; 84,000 yōjanas sunk in the great ocean, and 84,000 yōjanas above the great ocean.

Maha Meru is not square, but circular and rests on three pointed rocks, like a vessel on a tripod. Where these rocks rise to the elevation of 4000 yojanas, there Maha Meru rests firmly clasped by them, as by a pair of pincers. The three rocks rest upon the world of stone (Jinālankāra. Chakkāwāla dipeniya.)"

(15.) සිතෙර, සස උපමිච්ඡානපපමණේ සුගන්ධරාසිනා සිතෙර, පරිකබ්ච්චාසීතොතසසා උපමිච්ඡානපපමණේ ජ්වරපඬුනානං පරිකබ්ච්චාසීතොතිරුවං අසකණ්ණං පරියොසානා සතතපඬුනාසිතෙර, පරිකබ්ච්චාසීතා Sinerussa upadda bhāgappamānē Yugandare pabbato sinerun parikkhipitwā titho. Thassāpi upaddabhagappamane ísadhare pabbato tan parikkhipitwā tithothi. Ewan assa-kanna pariyošana satta pabbatā sinerun parikkhipitwa titha. "Half the height of Maha Meru the rock Yugandare stands encircling Sineru; half the height of Yugandare, the rock Isadare



proceeding outward: thus the Yughandera circle is half the height of Maha Meru, and the seventh circle, or Aswarkarna, is only 656 yoduns high above the sea. (16.) Between these circles and the Sakwala rocks four large continents exist, each accompanied by 500 islands, and separated from each other by stormy seas, so as to be inaccessible to all who are not possessed of super-human powers. The four continents are Jambudwipa (17) to the south of Maha Meru; this is the world inhabited by men: Uttarakura is situated to the north, Aparagoyana to the west, and Purwawideha to the east of

stands encircling that: thus to the end of Assakanna the seven rocks stand in succession encircling Sineru" (Wisuddhimagga, and comment to the Winnaya.)

(16.) තෙසුසුගඤ්ඤාච්චිතතාලිසයාජනකසසාති සමුද්දෙසෙත්ථා  
 මාලෙතා තතකතමෙට්ඨපරිට්ඨානතො ඊසධරෙච්චිතතාලිසයාජනක  
 සසාතිසමුද්දෙසෙත්ථාමාලෙතාලුම්භානායෙසෙසෙසුප්පට්ඨිතච්චිතතා  
 නතරෙච්චිතතා Tesu Yugandaro dwāchattāḷisa yōjana sahasāṣṇi samud-  
 dē ajjho gālho tattekamēwa upari uggatō Isadharopi chattāḷisa yojana  
 sahasāṣṇi samudde ajjho gālho tattakamēwa upari uggatōti iminā  
 nayēne sēsēsupy upaddhupaddhappamānetha wēditabbā. "Of these  
 the rock Yugandare is forty thousand yojanas beneath the surface  
 of the sea, and as much above its surface. Isadhare forty thousand  
 beneath the surface of the sea, and as much above its surface; in  
 this order the others encircle Maha Meru by half their height."  
 (Wisuddhimagga and commentary Winnaya.)

(17.) When speaking of the inhabitants of other Dwipas besides  
 Jambudwipa the continent in which men are said to reside, the  
 word මනුසා Manussa is used තනිපුච්චිදෙතොසෙතෙව්වුපෙසෙ  
 ච්චිතතාලෙසො තායෙච්චිතතාලෙසොච්චිතතාලෙසොච්චිතතාලෙසො  
 Tathāna pubbewidehetho āgatha manussēhi āwasithappadēso thāyēva  
 purimasanyāya wideherattanthi nāman labhi. "The sphere inha-  
 bited by men who arrived from Pubbewidehe was called Widehirat-  
 tan from its original signification." අපරගොයානෙසොච්චිතතාලෙසො  
 භිච්චිතතාලෙසොච්චිතතාලෙසොච්චිතතාලෙසොච්චිතතාලෙසො  
 manussēhi awasithappadēso aperanthajanapadothi nāman labhi.  
 "The sphere inhabited by men who arrived from Aparagōyāna was

**Maha Meru.** In reference to this a Pali stanza states:  
 “When the sun rises on this continent (Jambudwipa) it is  
 mid-day in Wideha, (18) evening in Goyana and midnight at

named *Aperanthajana-pada*” උත්තරාපරාසො භවත්සු සෙති භවත්සු  
 පරෙසො භුරුරස්සිති නාමං ලභි *Utterakurutho āgatha manuśsēhi*  
*āwasithappadēso Kururattanthi nāman labhi.* “The sphere inha-  
 bited by men who arrived here from Utterakuru was called  
*Kururattan.*” (*Mahanidāne Sutta wannena.*)

(18.) ඉමමෙතිදිපමෙතිපදාදා දෙතිමෙරස්සිති නාමානාති විදෙහදිපෙ  
 භුරුමෙතිදිපමෙතිපදානෙති නාමානාති පභවිතසිඝරතති. *Emamhi*  
*depamhi yadā udēthi majjhanthikō hōthi widēhe dépa kurumhi*  
*dépambhica atthamēthi gōyāna dépē bhawathadda ratthin* (See the  
 translation in the text.) Again it is added පුබ්බෙතිදිපමෙ උදෙහතිකාලෙ  
 මෙරස්සිති නාමානාති විඋත්තරෙ නාමානාති පමෙතිපදානෙති ඉමමෙතිදිප  
 මෙතිමෙරස්සරතති. *Pubbēcha dépēcha udenthi kāla majjhanthiko hothicha*  
*utterēna gōyānadépambhica atthamēthi emamhi depambhica*  
*majjaratthin.* “When the sun rises in Pubbewiseha, it is midday in  
 Utterakuru, evening in the continent of Goyana, and midnight in  
 this continent.” (*Comment on Dijhanikaya.*)

In the *Aganya Sutta Wannena* it is stated that “the moon  
 resides in the palace of a gem, and the outside is covered with  
 silver, both being cold. The sun resides within the palace of gold,  
 and the outside is covered with crystal both being hot. In size  
 the moon is 49 yojanas in diameter, and 147 yojanas in circum-  
 ference: the sun in diameter 50 yojanas, in circumference 150  
 yojanas. The moon is below and the sun above, between them one  
 yojana. From the lowest part of the moon to the highest part of  
 the sun, a hundred yojanas; the moon travels in a straight line,  
 slowly, and rapid crosswise; on her two sides the planets travel.  
 The moon moves towards them as a cow to her calf; the planets  
 do not change their position. The motion of the sun in a straight  
 line is rapid, and that crosswise slow. He is, on the day after the  
 new moon 10,000 yojanas away from the moon; the moon then  
 appears like a line; on the second day 10,000 more, thus gradually  
 till the day of full moon, at the rate of 10,000 yojanas, he is  
 farther and farther away from the moon. The moon then gradually  
 grows, and on the fifteenth day is full. Then on the first day,  
 again the sun travels 10,000 yojanas closer; the second day  
 10,000 again, till the day of new moon, at the same rate daily.  
 The moon then gradually appearing less on the day of upōsatha



is established on air. When the air is agitated by storms the water is violently shaken, and by this the earth trembles, constituting an earthquake. The earth is 240,000 yoduns in thickness, the water possesses a depth of 480,000 yoduns, and the atmosphere on which the whole rests is 960,000 yoduns deep. (20.) The four great continents are very frequently spoken of by Budha in his sermons. At the bottom of the system eight principal hells, each accompanied by 16 subordinate hells, are situated. Under Maha Meru is the Asura world. The Asuras were formerly Gods inhabiting the summit of Maha Meru, but they gave way to intemperance so as to become insensible, and Sakra (or Indra) with his hosts, cast them down to the bottom of Maha Meru, and occupied the conquered region. The Asuras (from *as*, a, negative, and *sur*, sura, gods) have frequently made war on Indra in order to recover their lost possessions, but have in every instance been ultimately defeated. Men, gods and demons inhabit the earth and its atmosphere. The demons are in many instances malignant and of horrid appearance, while many others are beneficent and are devout Budhists.

---

the wind on *ákāsa* or space. Ananda, whenever great wind blows the waters shake ; when the water is shaken the earth shakes."

(20.) වෛෂ්ණවස්සානිවතාරිනසුතානිවජ්ජන කංඛලතෙතසං  
 බාතායංචස්සනිවතාරිකතසසසානි අභේවනසුතානිවජ්ජනකංඛල  
 තෙතවජ්ජනංචාතෙතිච්ඡතංසසසානිකුරකො නවසතසසසානිවජ්ජන  
 තසුමුත්තොස ච්ඡවෛෂ්ණවස්සානිවජ්ජනකංඛලාකස්සනානි. *dwé satásasāni  
 chattari nahutanicha ettakan bahalatténa sankhátáyan wasundhará  
 chattarisatasahassāni attéwanahutānicha ettekan bahalatténa jalan  
 waté pathittitan. Tassapi san dhareko. Nawesatesahassāni máluto  
 nabhemuggatō sattinchéwasahassāni ésa lokaassa, santithi.* "This  
 earth is 240,000 yojanas thick, the world of water which  
 rests on the world of wind is 480,000 yojanas thick, the world of  
 wind which rises on space is 960,000: this is the position of the  
 world." (*Wisuddhimagga*, and comment on *Winnaya*.)— See Note 18.

The general name for the demons is *Yakshayo*, anglicised "Devils." Half the height of *Maha Meru*, or 42,000 yoduns above the surface of the sea is situated the heaven of the four guardian Gods (චාතුර්මහාරජා) *chátummahá-rájká*. In this the sun, the moon and the stars are situated. The sun is represented as having a resplendent circular residence 50 yoduns or 700 miles in circumference, and the moon to have one of 49 yoduns in extent. The eclipses of these bodies are stated to result from the efforts of the *Asur Rahu*, in the form of a large snake, to swallow them. (21.) We

(21.) In a Pali work called *Sarasangaha*, it is stated එළංමනි චිතකරවංචනාහුතාවචන්දිමසුරියෙතිංගනුකිලනිති ආවේලිති. "What! are the supernatural and mighty sun and moon swallowed by Rahu? Yes, he swallows them. Rahu's body in height is 4,800 yojanas; the breadth between his shoulders, is 12,000 yojanas; his thickness is 600 yojanas; his head 900 yojanas; his forehead 300 yojanas; the space between the eyebrows is 150 yojanas; the nose 300 yojanas; his mouth 300 yojanas deep; his palm and his foot in breadth are each 200 yojanas; and the joints of his fingers 50 yojanas. When he sees the shining of the sun and moon through hatred, he descends to the path they travel and remains there with his mouth open; the residence of the sun and moon then falls into it, which is 300 yojanas deep, as if it fell into the be. Awichi. The dewata resident therein at once bawl out, trembling with fear. He sometimes covers them with his hands, sometimes hides them under his jaw, sometimes licks them with his tongue, and sometimes moves them up and down in his mouth, like an animal chewing its cud, but he is not able to prevent their motion. Were he to keep them in his mouth saying 'I will kill these,' they would cleave the crown of his head and fly off."

Buddha says එතදග්ගං.නික්ඛලෙ අත්තනාවනංගදිංගනුසුරියෙ. *Etadaggan Bhikkawe attebháwinan yadidan Rahu asurindo.* "Prior Rahu stands first in bodily size." The comment gives his size as the above. — (*Anguttara*, 5th Suttan — 4th Nipáta.)

Again Buddha says රහුනික්ඛලෙඅසුරියෙ, චන්දිමසුරියානංගස නිලොසා. *Rahu bhikkawe asurindo chandima suriyánan upa-kiloso.* "Priests! Asur Rahu desires injury to the sun and moon." (*Anguttara* — 4th Nipata.)

should almost have doubted that this were a doctrine of the Budhist religion, were it not recorded in two Sūtras (22) or discourses of Budha, in the Sanyutta Nikaya, which forms a part of the three Pitakas. On one occasion Suriya, the God of the Sun, is represented as being in great distress in consequence of the efforts of Rahu to swallow him and his residence. He invoked the aid of Budha, who rebuked Rahu and commanded him to desist from his efforts. Rahu became terrified, and trembling fled to the Asuralokaya. The Sūtra, immediately preceding this states that the Moon experienced a similar danger and called upon Budha for help, who delivered him from the power of Rahu. These discourses, in addition to the one referred to concerning the cause of earthquakes in the Anguttara Nikayo, shew the incorrect nature of Budha's physical philosophy. On the summit of Mahā Meru, or 42,000 yodunas above the *chātummahārājikā* heavens *tāwatimsa* is placed, and in succession, above each other, the heavens *yāma*, *tusita*, *nimmánarati*, and *paranimmita wasawatti*. (23) In this world, and these six heavens, the pleasures of sense are enjoyed, and either virtuous or vicious actions may be performed. The period of the life of man in this world is estimated to be about 100 years, that of the gods of the heaven immediately above the earth (*chātummahārājikā*) is thus calculated; one day and night, are equal to 50 years of men: 360 of these

(22.) The translation of the two Sūtras are found in the "Friend," vol. II, p. 228.

(23.) See Vibhanga section of the Abhidamma Pitaka, also Anguttara, 3rd Nipāta.

days make one year, and the duration of life 500 of these years: the whole period being 9,000,000 years of men.

The period of life in each ascending heaven is in a four-fold proportion, thus in tāwatinsa it is 36,000,000, in yāma 144,000,000, in tusita 576 millions, in nimmānarati 2,304 millions, and in paranimmita wasawatti, the duration of life is 9,216 millions of years.

The whole of these details are taken from the Wibhaṅga division of the Abhidharma Pitaka. (24)

Above these heavens there are 16 Brahma worlds. A birth in the Brahma worlds results from the performance of the four Jhāna, or courses of profound meditation. (25.) There are three modes in which the Jhāna may be attended to, the imperfect, the medial, and the perfect.

The imperfect performance of the first Jhāna, comprehending investigation and research concerning the nature of things, procures a birth in the lowest of the Brahma worlds named බ්‍රහ්මපාරිසත්ථි brahma párisajjā, the duration of life being one-third of a kalpa. (26.) The medial performance of the same Jhāna leads to the බ්‍රහ්මදේවතී brahma purohita Brahma world, in which the duration of life is half

(24.) See Friend, vol. II. p. 65, 66.

(25.) පරිත්තං. Parittan, imperfect; මධ්‍යමං. Majjhiman medial; and පණිතං. Panitan, perfect.

(26.) පඨවිජානානං පරිත්තං භාවෙතො කත්ථෙ උප්පජ්ජති පඨවිජානානං භාවෙතො බ්‍රහ්මපාරිසත්ථිනං දෙවානං සහවිජානං උප්පජ්ජති පටෙමාජ්ඣානං කත්ථෙ උප්පජ්ජති බ්‍රහ්මදේවතීනං භාවෙතො පටෙමාජ්ඣානං පරිත්තං බ්‍රහ්මපාරිසත්ථිනං දෙවානං සහවිජානං උප්පජ්ජති. "To what is the initial contemplation of the first Jhāna introductory. The initial contemplation of the first Jhāna introduces to a residence with the gods of Brahmáparisajja. What is the length of their life? One third of a kalpa.

a calpa. The perfect performance of that Jhāna gives an entrance into the Maha Brahma world, the duration of life being an entire calpa. These three Brahma worlds, the six heavens, the earth, the residence of the Nāgas and Asuras, and the various hells are all destroyed at the termination of each calpa.

The performance of the 2nd Jhāna, comprehending the clear and undisturbed perception of truth, procures an existence in the පරිත්තභාසා parittābhāsa පමමනෙකා, appamānabhā and අභස්සර ආභ්‍යාසා ābhassara Brahma worlds, the period of life being 2, 4 and 8 calpas. We shall have occasion again to refer to the අභස්සර ābhassara Brahma world. The 3rd Jhāna, in which the devotee is free from the perturbations of pleasure or pain, and being healthy in body and in mind lives in the calm and contented meditation on the doctrines of truth, gives access to three other Brahma worlds more exalted than those previously mentioned, the term of life being 16, 32 and 64 calpas. The 4th Jhāna, in which the passions are so subdued that the devotee is always contented, being uninfluenced by the sensations of pleasure or pain, gives access to the remaining seven Brahma worlds, and the four Arupa worlds. The duration of existence is immense, being from 500 to 16,000 calpas. There is a peculiarity in

---

In this order, by means of the Jhanas, residence is obtained in the Brahma and Arupa worlds (Wibhangapparakarana and Sumangalavilasini &c.)

From the heaven මාහිමොත්තකයොපතිංසපරිදෙවාමපාතිකායෙව chatummaḥārahiketo pattāya uperī dēva opepatikayēva. So the beings in hell and the Pretayas, නිරාකරමිකාපෙතෙසුපිව tattha nareyika nētesupicha; they spring up at once to full maturity, being twelve years old මපාතිකායොපතිංසපරිදෙවකොසුවා &c., opepatikā olasavassuddésiko hutwa, (Sumangalavilasini &c.)



the first world in this last series, namely, the ~~asannyasattā~~ *asannyasattā* Brahma world. In this the duration of life is 500 calpas, but there is only corporeal existence without consciousness: they have neither sensation, perception, thought nor knowledge; but are as beings in a dreamless, profound sleep. The whole of the inhabitants of the Brahma worlds are entirely free from sensual pleasures or desires: they are not subject to the laws of gravitation, but move at pleasure through the atmosphere without obstruction, and their pleasures and pursuits are all intellectual and pure, resembling perhaps what St. Paul meant when he spoke of "spiritual bodies."

In the four Arupa worlds completing the series, there are no organised bodies, but the inhabitants possess sensation, perception, reasoning, and knowledge or consciousness. I do not clearly understand the nature of the existence or modes of operation in these worlds, and therefore cannot attempt to explain them. The term of life is stated to be 20,000,—40,000—60,000 and 84,000 calpas. This last is the longest possible duration of the existence of any Being.

I have before stated that at the end of a calpa the three lowest of the Brahma worlds, the six heavens, the earth and all below the earth will be entirely destroyed. The next destruction is to be by fire, and the mode in which this is to be effected is thus stated by Buddha in his discourse on the ascent of seven suns, contained in the *Anguttara Nikāya*: "Bikhus, Seneru (or Maha Meru) the King of Mountains, is in length 84,000 yoduns, in breadth 84,000 yoduns, beneath the great sea 84,000 yoduns, and above the sea 84,000 yoduns. A time will come when for many hundreds, thousands, and hundred thousands of years as

rain will descend from the clouds, in consequence of which cultivated plants and herbs, forests, grass and trees will become completely dried and burnt up. At the expiration of a long period after this, a second sun will appear, (27), and by the heat of these two suns the small rivers, ponds and lakes will be dried up and disappear. After another long period a third sun will arise, and by the heat of these three suns the large rivers, as the Ganges, the Jumna, &c., will be completely dried up. By the rising of a fourth sun, the seas into which these large rivers flow will be dried up. A fifth sun will afterwards arise, and by the heat of five suns at one time the great ocean (84,000 yoduns deep), will be gradually dried up until only a few puddles remain. A sixth sun will arise, and by the conjoined heat of these six suns, the great earth and Maha Meru will smoke continually like the skin of a potter. At length a seventh sun will arise; and by the heat of these seven suns, this great earth and Maha Meru, the King of Mountains, will burn, blaze up and become one mass of fire, and the flames will by the wind ascend as high as the Brahma worlds; and by the accumulated heat of the burning and blazing mountain, its rocky peaks, from 100 to 500 yoduns in extent, will be destroyed, and finally this great earth and Maha Meru will be so completely consumed that even ashes shall not appear nor exist. Even as when butter or oil is consumed in a vessel no residuum appears or exists, thus this great

(27.-) When there are two suns, one would be rising and the other setting. When there are three, one rising, one setting, and one on the zenith, &c., ဒုတိယသွက်သောဝဏ္ဏာဂ္ဂုရိုဘိဓာနာနုပေါဒါ တထိသာလေ့ဆောလေ့ဘိဓာနာနုပေါဒါဘိဓာနာပေါဒါနုပေါဒါ၊ Dattiya surayekūle ekō udēti ēka aññamēti, tatiyākāla ekō udēti ēkō aññamēti ēkō majjēhōti. (Manorathapurāṇe ၈၁)



aware of the doctrine of a Creator being held by the Brahmins, and he endeavours to account for its existence. In the *Brahma Jāla Sutra*, which is the first in the *Dirga Nikaya*, he discourses respecting the 62 different sects in the philosophical Schools, (31), for they can scarcely be called religions, among whom four held the doctrine both of the pre-existence of the soul, and of its eternal duration through countless transmigrations. (32) (The Buddhist doctrine of සංසාර *sansāra* is, antecedents and consequents.) Others believed that some souls have always existed while others have had a commencement of existence. Among these one sect is described as believing in the existence of a Creator, and Budha denies the correctness of this opinion. In explaining how the opinion originated he says: "There is a

(31.) මුත්තේ brahmajāla. Brahminical net. These 62 different philosophical sects are arranged in two general divisions, with their ten subdivisions පුබ්බන්තකප්පිකා *Pubbantha kappikā*, philosophers on the past, and අපරන්තකප්පිකා *aperantekappikā* philosophers on the future.

(32.) These are සස්සත්තවාදී *sassathawādā*, those who hold the eternity of matter and spirit, සස්සත්තං අත්තං න ඉත්තං න ඉත්තං පෙනති. *Sassathan atthānancha lōkancha panaya penthi*, they hold the soul and the world to be eternal. They are of four classes, viz. I.—Those who have a recollection of former states of existence from one up to many hundred thousand previous births. II.—Those whose recollection extends from 1 up to 10 සංවත්සරවත් *sanwattawiwatta*, i. e., kalpas. III.—Those who remember from 10 up to 40 සංවත්සරවත් *sanwattawiwatta* kalpas. The philosophers of these three classes remember the states in which they formerly existed. පුබ්බෙනිවසං අනුස්සරති; *Pubbeniwāsan anussarathi* their names, caste, complexion, joys, and sorrows, and the duration of their lives, at the termination of which they were born in another place and thus continued until they attained to their present state of being. The conclusion they draw is "Eternal are the soul and the world, unproductive of new existence, immutable, firm. Living beings flee away, they travel and fro, they die, they are born, but they (the soul and world)

time Bikhus, when after a very long period this world is destroyed. On the destruction of the world very many beings obtain existence in the Abassara Brahma Loka, (which is the sixth in the series and in which the term of life never exceeds 8 calpas) They are there spiritual beings (having purified bodies uncontaminated with evil passions or with any corporeal defilement) : they have intellectual pleasures : are self resplendent, traverse the atmosphere without impediment, and remain for a long time established in happiness. After a very long period this mundane system is reproduced, and the world named Brahma Wimàne, (the third of the Brahma Lokas) comes into existence, but uninhabited."

"At that time a Being, in consequence either of the period of residence in Abassara being expired, or in consequence of some deficiency in merit preventing him from living there the full period, ceased to exist in Abassara, and was reproduced in the uninhabited Brahma Wimàne. He was there a spiritual being : his pleasures were intellectual : he was self resplendent, traversed the atmosphere, and for a long time enjoyed uninterrupted felicity. After living there a very long period in solitude a desire of having an associate is felt by him, and he says, Would that another being were dwelling in this place. At that precise juncture another being ceasing to exist in Abassara, comes into existence in the Brahma Wimàne in the vicinity of

---

remain for ever identically the same." සස්සතොදත්තාව ලොකානි  
 චංඤාකූටෙඤ්චෙසිකථාසිත්තිතාතෙවසත්තා සංඛාවන්තිසංසරන්තිවචන්  
 තිලපථස්තිඤ්ඤෙවසස්සතිසමන්ති Sassató attàcha lokócha  
 wanjho kútatto Esikattayi tithó técha sattá sandhúwanti sansa-  
 ranti chawanti uppajjanti atthitwe sassati samanti. The fourth  
 class are reasoners who by induction arrive at the same conclusion.

the first one. They are both of them spiritual beings, have intellectual pleasures, are self—resplendent, traverse the atmosphere, and are for a long time in the enjoyment of happiness. Then the following thoughts arose in him who was the first existent in that Brahma Loka : I am Brahma, the Great Brahma, the Supreme, the Invincible, the Omniscient, the Governor of all things, the Lord of all. I am the Maker, the Creator of all things. I am the Chief, the Disposer and controller of all; the Universal Father. This being was made by me. How does this appear? Formerly I thought, Would that another being were in this place, and upon my volition this being came here. Those Beings also, who afterwards obtained an existence there, thought, this illustrious Brahma is the Great Brahma, the Supreme, the Invincible, the Omniscient, the Ruler, the Lord, the Creator of all. He is the Chief, the Disposer of all things, the Controller of all, the Universal Father. We were created by him, for we see that he was first here, and that we have since then obtained existence. Furthermore, he who first obtained existence there, lives during a very long period, exceeds in beauty, and is of immense power; but those who followed him are short lived, of inferior beauty, and of little power. It then happens, that one of those Beings, ceasing to exist there, is born in this world, and afterwards retires from society and becomes a recluse. He subjects his passions, is persevering in the practice of virtue, and by profound meditation he recollects his immediately previous state of existence, but none prior to that: he therefore says, that illustrious Brahma is the Great Brahma: the Supreme, the Invincible, the Omniscient, the Ruler, the Lord, the Maker, the Creator of all.

He is the Chief, the Disposer of all things, the Controller of all, the Universal Father. That Brahma by whom we were created is ever during, immutable, the eternal, and unchangeable, continuing for ever the same. But we, who have been created by this illustrious Brahma, are mutable, short lived and mortal.”(33)

By this extract it appears that Budha had a clear perception of the doctrine of a supreme, self existing Creator, yet he pronounces that doctrine to be false, for he says in another part of the same discourse. “The teaching of those Samanas and Brahmins, who hold that some Beings are eternal and others not eternal, is founded on their ignorance and their want of perception of truth, and is the result of the impressions made upon the senses.”(34.)

There are many who are called Buddhists who acknowledge the existence of a Creator: but they do this from ignorance of the teaching of Budha. The Buddhist system

(33.) The second class of philosophers on the past is එකච්ඡාසත්තිකාචාර්යසභා Ekacha sassatika ekatcha asassatika. They hold that some beings are unchangeable and eternal, and others derived and mutable. Under this head is the passage translated in the lecture.

(34.) බ්‍රහ්මාදිවිමානවිමානාදිභිමානාසංකල්පානිමානානි these epithets are defined in the comment. The word භිමානා is explained thus : පටිච්චෙදනතසිනෙරුචස්සකවාලමහාසමුද්දමන්දිමසුරියාමධොභිදම්මිකං. Patewi himewanta sinéru chakkawāla mahā sumudde chandime suriyācha mayā nimmitāti. “The earth, the Himala, the Mera, the Sakwala, the great oceans, the sun and moon were created by me.” This was, Buddha says, an erroneous view of that school. Budha says, again, that there are four subjects improper to think about, අච්ඡෙතයාධම්මො, achenteiya dhammā, one of which was about the world (as the Comment says, who created the sun, moon, &c.), if any one would think about them he would turn insane (Anguttara, page 97.)

does not acknowledge the possibility of such a Being existing. (35.)

Having noticed the tenets of Buddhism respecting a Creator, we will consider what it teaches respecting the nature of man. The whole of the constituent parts of a sentient Being is arranged in five divisions called *වත්ත* *khandā* or collections: they are the *රූපකවත්ත* *ruphakkhando*, the organized body; *වේදනාකවත්ත* *wédanakkhandho*, the sensations of pleasure pain or indifference; *සන්නයකවත්ත* *sannyākkhanhdo*, or the perceptions: *සංඛාරකවත්ත* *sankhārakhandho*, or the thoughts contemplations and reasonings; and the *විනිශ්චයකවත්ත* *winnyānakhandho* or the understanding, the consciousness. Except the body there is no entity among these *වත්ත*. (36.) There is merely

(35.) The Buddhists in general do now openly deny the existence of a Creator.

(36.) The *Khandas* are divided into—I. *අයතනානි* *A'yatanāni*, sentient organs and their relative objects; there are twelve of them classed in 6 pairs:—1, *චක්ඛු* *chakkhu* and *රූප* *rūpa*, the eye and figure: 2, the ear and sound, *සොත* *sōta* and *සද්ද* *sadda*: 3, the nose and odour, *ඝාණ* *ghana* and *ගන්ධ* *gandha*: 4, the tongue and flavour, *ජීව්හ* *jewhā* and *රස* *rasa*: 5, the body and touch, *කාය* *kāya* and *ස්ප්ඤ්ඤ* *phassa*; and 6, the mind and objects of thought *මන* *mana* and *ධම්ම* *dhammā*.

II. *ධාතුයො* *Dhātuyo*, which are arranged in 6 triplets, as the eye and the figure, and the consciousness of the eye or vision, being the first triplet

III. *ඉන්ද්‍රියානි* *Indriyāni*, the organs and their capabilities; there are 22 of them

IV. *ආහාර* *A'hārā*, the food of action, this is fourfold.

V. *ස්ප්ඤ්ඤ* *Phassā*, contact.

VI. *වේදනා* *Wedanā*, sensation; there are seven of them.

VII. *සන්නය* *Sannā*, perception.

VIII. *චේතනා* *Chetanā*, thought.

IX. *චිත්තානි* *Chittāni*, thoughts. These are included in the five *Khandas*. The *Wedanā*, *Sannā*, and *Sankhara khandas* are *සම්ප්ප්ප* *sampāp* elicited by contact with external objects (*Wibhaṅga* of the *Abhidhamma*).



an organized body, and inherent in this body a capability of sensation, perception, contemplation and knowledge, elicited by contact with other objects: there is no feeling, thinking or knowing soul in a man. (37.) The body itself is mutable, and the other වජ්ඣ khandhā are in a perpetual flux. According to this system, man is never the same for two consecutive minutes: the අරූපධ්මම arúpadhamma as the whole of the වජ්ඣ khandhā except the body are called, are constantly changing: they are produced, they cease to be, and never remain the same: they are compared to the periphery of a wheel in motion, always altering its position: and to the light of a burning lamp, which though continuing to shine has its rays continually changing. The lamp continues to burn during the whole night, constantly emitting fresh rays: so the man continues so long as his body lives, but the mental processes are constantly changing. This doctrine of Buddha is certainly not held by the majority of the Buddhist laity, and was not, and perhaps up to the present day is not, received by several of the priests, but it is most clearly taught in the sacred books. To clear up this question it is necessary to determine the meaning to be attached to the Pali word අත්තා attā, translated into Singhalese by the word අත්මය

---

(37.) Of රූප Rúpa khanda, it is said by Buddha, රූපං භික්ඛු චේතනිකං යදනිකං තංඋක්ඛං යංඋක්ඛං තදනත්තා යදනත්තාතං භොගං උමභෙසො හමස්මි භමෙසො අත්තා, Rúpan bhikkhawé anichchan yadanichchan tan dukkhan yan dukkhan tēdanattā yadanattā tan nētan mama nésó hamasmi namésó attāti. Priests body is impermanent, that which is impermanent is sorrow, that which is sorrow is not the soul, that which is not the soul is not mine, that is not myself, and is not my soul. So of the other four Khandas (Saṃyut nikāya, Salāyatanevaggā).

âtmanāya and which we render "soul." In the Brahma Jala Sutra, Budha states, that some taught that the soul අත්ත (attā) is eternal in duration; they said "living Beings transmigrate: they die, they are born, but their existence continues as being eternal." In another part of the same sermon when speaking of the doctrines of the ဣဇ္ဇဒဝါဒ, uchchédawāda, or those who believe that the soul will be finally annihilated, he relates a conversation between some philosophers: "Another will reply and say, Friend, I do not deny that there is such a state as you have mentioned, but the soul will not then be annihilated: there is, Friend, another state unknown and unexperienced by you, but known and perceived by me; in that state the form is godlike, the pleasures are mental, and all the powers and faculties are in perfection. Upon the dissolution of that body by death the being is cut off, destroyed and no longer exists." These extracts are sufficient to prove that by the word අත්ත attā or soul, is meant an immaterial substance which continues to exist after the death of the body. The Comment states, that there are four leading opinions respecting the nature of the soul, the last of which is, that it remains in the body as a jewel deposited in a casket: and that upon death it flies away as a bird from its cage. There can therefore be no doubt but that Budha attached to the word අත්ත attā the meaning we attach to the word "soul."

We have already noticed that the whole constituent parts of a man are divided into five ဝေဒဝါ but there is also another arrangement called အာယတနာ āyatana or residences: they are the six personal āyatana; viz. the eye, the ear, the nose, the tongue, the body, the understanding;

and the corresponding external áyatana, figure, sound, odours, taste, touch, and material or immaterial objects. Budha declares that none of the khandhá or áyataná constitutes a soul. (38) There is also a more compendious arrangement into නාමරූප námarúpa, the රූප rúpa signifying the body, (39) and the නාම náma, the intellectual faculties: this is frequently used in the writings of Budha. Concerning the චන්ධා khándhá he says, රූපං භික්ඛු අනත්තං වේදනා අනත්තං සංකරු අනත්තං සංඛාරං අනත්තං විඤ්ඤානං අනත්තං rúpan bhikkhawe anattá, wédaná anattá sannýá anattá, sankhárá anattá winnyánan anattá

(38.) චන්ධං භික්ඛවෙ අභිධං යදභිධං තදුත්ථං යදුත්ථං තදා තවා යදනත්තං තෙනං චම්බො සොහච්ඡි නම්බො අත්තං, Chak-khun bhikkhawe auichchan yadanichchan tan dukkhan yas dak-khan tadanattá yadanattá tan nétan mama nésó hamasminnattá attátí, Priests, the eye is impermanent, that which is impermanent is sorrow, &c.

(39) Buddha, in the Wibhanga section of the Abhidhamma defines what නාමරූප Námarúpa is තනිකර්ම. විඤ්ඤානස්ථාන නාමරූපං අත්තිකාමං අත්තිරූපං, Tatthakathaman Winnánappachayá námarúpan attthináman attthirúpan. What, are the Náma Rúpa resulting from consciousness? there is Náma, there is Rúpa. තනි කර්ම. නාම. වේදනස්ථානං සංකරුස්ථානං සංඛාරස්ථානං ඉදංච්චිකාමං, Tattha kathaman náman wedanakkhandho sannákkhandho sankháraakkhandho idan wuchchati náman. Of these what is náma? The assemblage of sensations, perception and discrimination. These form Náma, තනි කර්ම. රූප. ව්‍යාපාරො මහා භූතානං උපාදාය රූපං ඉදං ච්චිකාමං, tattha kathaman rúpan chattáro mahá bhúthánan upádyaya rúpan idan wuchchati rúpan. What is Rúpa? The four elements and a form produced from the four elements. This is called Rúpa. Here we do not see that the විඤ්ඤානස්ථාන is included in නාම Náma, but it must be borne in mind that it depends for its existence upon Náma and Rúpa නාමරූප. සමුදයා විඤ්ඤාන. සමුදයා නාමරූප භික්ඛු විඤ්ඤාන භික්ඛවා, náma rúpan samudayá winnyánan samudaya námarúpa nirodhá winnyána nirodho. With the origie of Náma rúpa is the origin of Winyána, with the cessation of Náma rúpa is the cessation of Winyána.

“Bikhus, the body does not constitute a soul, the sensations do not constitute a soul, the perceptions do not constitute a soul, the reasonings do not constitute a soul, the consciousness or understanding does not constitute a soul.” Thus he affirms of each of the khandá that it is not a soul. Again he says රූපං භි ඛණ්ඩෙ අනත්තං යොපි හෙතුං යාපි පච්ඡායා රූපස්ස උප්පාදාය සොපි අනත්තං අනත්තං සම්මතං රූපං කුතො අත්තං භවිස්සති rūpan bhikkhawey, anattá yopi hetu yopi pachchayo rūpassa uppádúya sopi anattá sambhutan rūpan kuto attá bhawissati. “Bikhus, body is not a soul : if there be any kind of cause for the production of body, that cause also is without a soul : how can body become a soul since it is produced by soul-less causes ?” He repeats the same verbatim concerning the sensations, the perceptions and the reasonings : and although some unlearned Buddhists have supposed that the විඤ්ඤාණං winnyánan is a transmigrating soul, Budha says. (40) “The understanding or consciousness (විඤ්ඤාණං winnyánan) is not a soul : if there be any cause by which the විඤ්ඤාණං winnyanan is produced, that cause also is without a soul : how can විඤ්ඤාණං winnyánan be a soul, seeing it is produced by soul-less causes. ?”

To remove all doubt respecting his doctrine being that a soul does not exist, we refer to his conversation with සුසිමො පරිබ්බජකං Susimo Paribbājiko. Budha says, “Susimo, the body, the sensations, the perceptions, the reasonings, the understanding or consciousness (enumerating each distinctly) whether past, future or present, whether internal or external, whether gross or minute, base or excellent, remote or near, are not mine; none of them constitute “I.” None of

---

(40.) See Salayatana section of Sanyut Nikáya.

these are to me a soul. This is known by true wisdom." This teaching, which is again and again reiterated, is clear: there is no soul: nothing of which an individual may say, "This is I." Body exists; the other කන්ධ, khandhā are only functions of the living body, produced by the contact of external objects with the bodily organs. The same doctrine is enforced, in similar language respecting the eye, the ear and other bodily organs, together with the මනෝ mano, or විනිශ්චය, winnyānan or understanding, the seat of which is the heart, as the eye is the seat of vision; this is repeated respecting the various organs, both individually and collectively. (41)

But how does this affect the doctrine of transmigration, or more properly the continued processes of perpetuated existence? In the book called *Milinda Prashna*, or the Questions of King Milinda, the subject is discussed by the king and the learned priest Nāgasēna. This work is of high authority among the Buddhists, although not one of the Sacred Books. The term නාමරූප, nāmarūpan is frequently used in this discussion, comprising all that we mean by body and mind. I shall omit the Pali, merely giving a translation of the conversations.

The King enquired, Lord Nāgasēna, what is conceived (in a new birth)? The Priest replied, the body and mind

---

(41.) සුභිම සංකිවිරූපං අනිත්‍යානාගත පඤ්චස්සන්තං අපඤ්චනංවා ඛනිධාවා මලාරිකංවා' සුබ්බමංවා භිතංවා පණිගංවා සං දුරෙවා සන්තී කෙවා සඛිමං නෙතං මම නෙසොතථමි නෙ මෙසො අත්තාති එවමෙ තං යථාභූතං සම්මජ්ජකස්ස දඨිඛිධා, susīma yankinchirūpan aṭṭhā nāgata pachchuppannan ajjhattanwā bahiddhāwā olārikanwā su-khumanwā hīnanwā panītanwā yan dūrēwā santikēwā sabbannetan mama nesohamasmi neso me attāti ewametan yatha bhūtan sam-mappannāya dathabbhā. So of all the other Khandhas (*Sanyut Nikāya* also Budha's conversation with Anuruddha).

(නාමරූපං nāmarūpan) Great King, are conceived. But, Lord Nāgaséna, are this same body and mind (නාමරූපං namarupan) conceived? No, Great King, this same body and mind are not conceived: but by this body and mind good or evil actions are performed, and in consequence of these actions another body and soul are conceived (නෙක කම්මෙන අනෙකා නාමරූපං පටිසන්දහති téna kamména annyan nāmarūpan patisandahati.)

To remove all doubt the King enquires, saying "Lord Nāgaséna, you have spoken of නාමරූපං nāmarūpan. Of these what is Nāma and what is Rúpan? Great King, is any thing material (මලභිං olarikan) that is Rúpa. Is any thing immaterial (සුකුමං sukumá) the thoughts, they are Nāma." Thus nāmarūpan is represented as constituting the whole man, body and soul, and the doctrine clearly laid down is one of antecedents and consequents. (42) A man performs good or bad actions: this is the antecedent. Because of these actions another Being, another body and mind are produced: this is the consequent. They are in no sense the same: the latter is a result of the former, but there is no transmigrating soul. The King does not appear satisfied, and prosecutes his enquiries: saying, "Lord Nāgaséna, does conception take place without any being transmigrating? Yes, Great King, conception takes place without any Being transmigrating. How does this take place? explain it by a metaphor. Great King, a man lights one lamp from another lamp: does the one lamp transmigrate to the other lamp? No, my Lord. In the same way, Great King, conception takes place without transmigration."

---

(42.) Milinda is referred to in Manorathepureni comment on Anguttara Nikáya, page 61.

The King further enquires, "Lord Nágaséna is there any Being who transmigrates from this body to another body? No, Great King. But, "Lord Nágaséna, if there be no Being who transmigrates from this body to another body, is there not a deliverance from the consequences of evil actions. True, Great King, if there be no conception there is deliverance. By this body and mind good or evil actions are performed, and in consequence of those actions another body and mind are produced, and therefore there is not deliverance from the consequences of sin."

Budha explicitly declares that sin and punishment are necessarily united. But it appears that it is sin that is punished, and not the sinner. To avoid the difficulty connected with this doctrine, the Buddhists say, that although the child born is not the same with the man who previously existed, he cannot be said to be entirely a new Being, because his present existence is the result of actions performed by a person who formerly existed, but who is now non-existent; and they illustrate it by the metaphor of a mango-tree. A mango from the tree having been eaten the stone is planted, and a fresh mango-tree is produced, which is not properly a new tree but a continuance of the old one, being produced from it. (43.) But according to this, the son must be the same with his father, being produced by his instrumentality. The mango-tree metaphor is this: the mango tree represents an existing man: the mango fruit the good or evil conduct of that man: as from a stone of that tree another tree grows which is not altogether different from the first tree being a result of that first tree,

---

(43.) This metaphor of the Mango tree is also used by Nágaséna (Milinda Prashna.)

so from the good or bad actions of a man another man is produced, who is not properly another but a continuation of the first. The metaphor will not bear strict investigation; but the doctrine of Budha undoubtedly is, that the performer of an action is not the recipient of the result of that action. In the Sanyut Nikaya it is stated that a Brahmin came to Budha and asked, "How is it Goutama, Does he who has performed actions (in a previous birth) experience (in this world) the results? Brahmin, the doctrine that he who has acted receives the result is one extreme (the *සස්සတ္တဝါද* sassata wádá or doctrine of the perpetual existence of a transmigrating soul.) How then, Goutama, does one person perform the action, and another person endure the results? Brahmin, the doctrine that one person performs the action and that another person endures the result is the other extreme (the *උච්ඡේදවාද* uchchédawádá who teach the annihilation of an existing soul.) The Tattagato avoiding both these extremes preaches a middle doctrine : namely, that in consequence of ignorance, merit or demerit is accumulated, &c., declaring the doctrine of the *පට්ඨසමුප්පාද* patichcha samuppádo which we shall examine hereafter. We quote part of another discourse, where the subject is more fully declared: The Paribajako recluse, named Timbaruko, come to Budha and said, Goutama, does a person receive happiness or sorrow as the result of his own conduct (in a previous state?) Budha replied, Not so, Timbaruko. What Goutama! does he receive happiness or sorrow as the result of another person's conduct? Not so, Timbaruko. What Goutama! does he receive happiness or sorrow as the result of the joint action of himself and of some other person? Bagawa replied, Not



so, Timbaruko. What then, Goutama, does a man receive happiness or joy, irrespective of his own conduct or of the conduct of others? Not so, Timbaruko." (44) He afterwards declares that he has abandoned the doctrine of a transmuting soul, as held by the සස්සතවාද, sassatawādā and also the excision of an existing soul, as held by the උච්චේදවාද, uch'chédawādā and has chosen a middle doctrine, and then recites the පටිච්ඡන්තපද, patichcha samuppāda which appears to be the key of his philosophical position, explaining the processes by which existence is perpetuated. (45) We must in endeavouring to explain this, quote the Pāli and afterwards state the meaning, අපිඤ්ඤා පටිච්ඡනං විකුක්ඛන්තං විකුක්ඛන්තපට්ඨනං නාමරූපං නිව

(44) The conversation with Timberuka is found in *Saṃyutta Nikāya*, page 61, the Pāli is තිබ්බරුක පරිච්ඡාරකො සභවස්සංඝං චොව භික්ඛුස්වා හො හොතම සසං කතං සුඛ දුක්ඛස්ති මානෙව තිබ්බරුකාති සභවා අචොව කම්පන හො හොතම පරකතං සුඛ දුක්ඛස්ති මානෙව. තිබ්බරුකාති සභවා අචොව භික්ඛුස්වාහො හොතම පරකතම සුඛ දුක්ඛස්ති මානෙව. තිබ්බරුකාති සභවා අචොව කිංපන හො හොතම අසසං කාරං අපරං කාරං අභිම සමුප්පන්නං ජා දුක්ඛස්ති මානෙව. තිබ්බරුකාති සභවා අචොව, timbaruka paribhājako bhagawantan etadawōcha kiñnukhō bhō gōtama sayan kama sukha dukkhanti mähēwan thimbarukāti bhagawā awōcha kimpa bhō gōtama parakatan sukha dukkhanti mähewan timbarukāti bhagawā awōcha; kiñnukhō bhō gōtama sayan katantha parakatantha sukha dukkhanti mähewan timbarukāti bhagawā awōcha; kiñnukhō bhō gotama asayan kāran aparān kāran adichecha samuppanna sukha dukkhanti mähewan timbarukāti bhagawā awocha. Gotama! does a person receive happiness or misery as the result of his own conduct? Bhagawa replied not so Tembaruka. What Gotama is joy and sorrow the result of another's conduct, Bhagawa replied not so Tembaruka. What Gotama is joy and sorrow the result of the joint acts of himself and others? Bhagawa replied not so, Ten biruka. What Gotama, does one receive happiness or sorrow without any cause of his own acts, nor the acts of another? Bhagawa replied not so Tembaruka.

(45.) See note 30.

රුප්පඛයාසලායනිකංසලායනිකපඛයා එස්සයා එස්සපඛ  
 යා වෙදනා වෙදනා පඛයා නාහා තත්තා පඛයා උපාදනං  
 උපාදන පඛයා හම්මා හව්පඛයා ජුති ජුති පඛයා ජරමර  
 ණං සොන පරි දව දුක්ඛ ඥෙමනස්සුපායාසා සමිහවස්සි  
 awijja pachchayásankhsrá sankháráppachcháyá winnyánan  
 winnyánáppachchayánámarúpan, namarúpa pachchayá salá-  
 yatanán, saláyatana pachchayá phasso, phassa pachchayá  
 wédaná, wédaná pachchayá tanhá, tanhá pachchayá upádá-  
 nan upádána pachchayá bhawo, bhawa pachchapá játi, játi  
 pachchayá jará maranan soka paridéwa dukka domanassup-  
 áyásá sambhawanti.

In consequence of ignorance, merit or demerit is pro-  
 duced. In consequence of merit or demerit the conscio-  
 usness, in consequence of consciousness the body and the  
 mental faculties, the six organs of sense ; in consequence of  
 the six organs of sense, touch or contact (or the sensation of  
 touch); in consequence of contact the sensations, in conse-  
 quence of the sensations desire, in consequence of desire an  
 attachment to existence, in consequence of attachment or  
 cleaving to existence, a place of birth ; in consequence of a  
 place of birth, birth itself ; in consequence of birth decay,  
 death, grief, weeping, pain, discontent and dissatisfaction  
 are produced. It is then added, that a complete cessation  
 of ignorance, necessarily results in a cessation of all the  
 consequents, so that being itself becomes extinct. It will  
 be observed, that the intervention of a previously existing  
 soul, or of a creator, or even of parents, is not regarded as  
 necessary to the completion of this chain of existence ; the  
 two first as being non-existent ; the other (parents) as  
 that which may be for the production of the body, but  
 which is not absolutely necessary, as in many instances the

විප්පාතිකා *ópapátiká* formation, (which Turnour in his translation of *Maha Wanso* calls "the apparitional" appearance) supersedes the necessity of parents, as in these instances merit or demerit leads to the instantaneous and full development of a perfect man or woman, as well as of the gods and the sufferers in the hells.

This account appears to be very unphilosophical and confused. In the *Wibhanga* division of the *Abhidharma*, the terms used are clearly defined: thus අවිජ්ජ *awijjā* or ignorance is defined to be the ignorance of the four principal doctrines of Budha: (46) they are 1. That sorrow is connected with existence in all its forms. 2.—That its continuance results from a continued desire of existence. 3. That a deliverance from existence and its sorrows can only result from the complete extinction of this desire: and 4thly. That this extinction can only result from a course of pure morals, eight divisions of which are specified.

From this ignorance සංඛාරං *sankháran* results, which is defined to be කුසල *kusalá* and අකුසල *akusalá* or merit and demerit, accumulated in the various worlds of gods and men, or of the *Brahma* gods, or of the inhabitants of the *Arúpa*

(46.) තනි කතමා අවිජ්ජ දුක්ඛෙ අඤ්ඤාණං දුක්ඛෙ සමුදයෙ අඤ්ඤාණං දුක්ඛෙ නිවර්තනෙ අඤ්ඤාණං දුක්ඛෙ නිවර්තනෙ භාමිතිකා පටිපාටි අඤ්ඤාණං අයං චූළිච්චි අවිජ්ජ, *tattha kathamá awijjā dukkhé annánan dukkha samudayé annánan dukkha nirodhé annánan dukkha nirodha gáminiyá patipadáyā annánan ayan wuchchati awijjā.*

(47.) තනි කතමා අවිජ්ජ පටිච්ඡා සංඛාර පුඤ්ඤාති සංඛාරෙ අඤ්ඤාතිසංඛාරෙ අනුජාතිසංඛාරෙ කායසංඛාරෙ චිත්තසංඛාරෙ චිත්ත සංඛාරෙ, *tattha kathamá awijjā pachchayá sankhárá punnābhī sankháro apunnābhī sankháro anañjabhī sankháro kāyasankháro wachī sankháro chittasankháro.* Of these what is the සංඛාර *sankhara* resulting from ignorance? accumulation of merit and demerit, merit accumulated in the *Arúpa* worlds; that of bodily actions, of words and of thoughts.

worlds. (47) In the case of any individual coming into existence, this සංඛාර sankhará is the merit or demerit of the acts of his immediate predecessor in that chain of being. From this සංඛාර, sankhará විඤ්ඤාණං winnyánan is produced, which is defined to be the consciousness of the eye, the ear, the nose, the tongue, the body and the understanding, which form the six Ayatana and are not in existence until after the body is formed: විඤ්ඤාණං winnyánan therefore can only be understood as signifying a power hereafter to be developed, when the organs have come into existence and come in contact with external objects. (48) How consciousness can exist in the abstract, without the existence of any conscious being, is difficult if not impossible to understand. This undeveloped consciousness is regarded as the antecedent of body and mind, and this body and mind as the antecedent of the organs of the body and mind. (49) The විඤ්ඤාණං winnyánan or consciousness, which is the third in this chain of existence, is declared to be the විඤ්ඤාණං winnyánan or consciousness of the organs of body and mind which are the fifth in the series. All this unphilosophical confusion of thought and expression is used

---

(48.) තනි තනිව සංඛාරජප්පයා විඤ්ඤාණං වක්ඛු විඤ්ඤාණං සොභ විඤ්ඤාණං ඝාණ විඤ්ඤාණං ජිව්හ විඤ්ඤාණං කාය විඤ්ඤාණං මනෝ විඤ්ඤාණං ඉදං චූළිචති සංඛාරජප්පයා විඤ්ඤාණං, tattha kataman sankharappachchayá winnánan chakkhuwinnánan sotawinnánan ghnawinnánan jiwáwinnánan káyawinnánan manowinnánan idan vuchchati sankharappachchayá winnánan. What is the Winnána the consciousness, the consequence of Sankhura, the consciousness of the eye, the consciousness of the ear, the consciousness of the nose, the consciousness of the tongue, the consciousness of the body, the consciousness of the mind, this is the consciousness, the result of Sankhára.

(49.) See මමම වක්ඛජප වතනන සුතං, Dhamma chakkappa wattana sutan.

to avoid the necessity of acknowledging the existence of a creator. We may observe that the පටිඨ or පටිඨා does not signify that *by* which a thing is made or produced, but that which is the antecedent of the thing produced, and without which the thing would not be. Thus the beautiful organization of the body, with all its indications of a designing and powerful architect, is stated to be the consequent of its own consciousness: and the eye with its complicated mechanism is represented as being the consequent of the චක්ඛුවික්ඛාදි භංගං chakkhúwinnyānan or the eye consciousness: and the same holds good with respect to the other bodily organs. Besides, in this passage the සංඛාරා sankára are not existing things, but merely the qualities of actions previously performed, and Budha teaches, that the qualities of actions performed by a Being (whether man or animal) now non-existent, is the efficient cause of the production of the body and mind of a new Man, without the intervention of any active agent. This I believe is a correct statement of the doctrine of the පටිඨපද්ධතාදි páticcha-sammuppádá so far as the production of the body and mind of man is concerned.

The doctrine of Nirwana is intimately connected with the preceding. The word නිර්වාන nirwana (from නි ni, a negative, and වාන wána desire) signifies a complete freedom from desire, and this necessarily leads to a complete cessation of existence. Thus at the close of Budha's first discourse at Benares, having stated that he has experienced this cessation of තණ්හා tanhá or desire, he observes, අයමත්තිමාරුති නත්තිදිති ඥාතවතො ayamantima játi natthi dāni punabbawo. "This is my last birth; henceforth I shall have no other state of existence" and at the close

of his discourse called *Brama Jála* (50) he says, *Bikhus*, that which binds the *Tatagato* (i. e. *Budha*) to existence is cut off, but his body still remains, and while his body remains gods and men perceive him; but at the end of life, when the body is dissolved neither gods nor men will perceive him; that is, he will no longer exist. (51)

(50.) *භික්ඛවෙ තථාගතස්ස කායො උච්චින්නා භවතෙත්තිකෙ තිථිති අස්සකායො යාව ධස්සති තාවදෙව චෙත්සසානං දක්ඛිත්ති bhik khawe tathágatassa káyo uchchinna bhawanettiko titthati assakáy yáwa thassati táwa dewa manussánan dakkhinti* (see the English in the Lecture).

(51.) There was a controversy at *Mátara* some years ago on the subject of *Nirwána*; one party holding that it was the entire cessation of existence, while the opposite party held that some part of the *Wiññána* (consciousness) existed and enjoyed perfect happiness, although none but a *Rahat* could explain the nature of that existence nor its enjoyment. Mr. G.'s view is the correct one, according to Buddhism there is nothing immortal. When *Buddha* died it is stated that *Sakrayá* uttered the following stanza, *අනිච්චාවත සංඛාර උප්පාදවය ඛම්මිනො උප්පජ්ඣා නිරුපකිත්ති තෙසංචුපසමොක්ඛොති, anichchávatan sankhárá uppádawayá dhammino upajjitwá nirujjhanti tésanvupasamo sukhoti*. "Truly the *Sankhárá*s, the component parts of human nature, are impermanent; their nature is to come into existence and die. Being born they disappear; their *චුපසමොක්ඛො* complete subjection is happiness. Then the Priest *Anuraddha* rehearsed this *ආර්ථය, අසං උද්දමනෙක චිත්තෙන වෙදනං අප්ඤ්චාසය ප්‍රචේතස්සෙව නිවිධාන විමොක්ඛොචෙතසොඅසුති Asallitena chittena wedananajjha wasayi pajjotasasewa nibbánan wimokkhotasasahuti*. With a firm mind he bore the pain, as a fire which extinguished itself the mind became free (from every thing existing) (*Mahaparinibbana Suttan.*)

As the *පටිඛසමුප්පාද Patichcha samuppáda* gives the consequence of ignorance and so on, the complete cessation of ignorance necessarily results in a cessation of all the consequents, so that the being himself ceases to exist. It is said *ජාතිනිරොධො ජරමරණ සොක පරිදෙව දුක්ඛ දෙවතස්ස ස්වභාවො නිරොධො, játi nirodho jará marana Soka paridewa dukkha domanassupáyásá nirodho*. from the cessation of birth is the cessation of decay, death, sorrow, crying, pain, disgust and passionate discontent. Thus this whole body of sorrow ceases to exist. (*Sanyut Nikáya.*)

Nirwana is represented by the metaphor of a large fire which has burnt itself out, and by a lamp the oil and wick of which are completely consumed so that nothing remains. Nirwana is the entire cessation of existence. It differs from annihilation, as that supposes that an existent soul has been destroyed, whereas according to Budha there is no soul in existence which can be annihilated.

The morality of the Buddhist system is pure, no vice being tolerated. The five precepts binding on every Buddhist are 1. Not to destroy animal life,—2. To abstain from stealing. 3.—To abstain from lying,—4. To abstain from illicit intercourse with women, and 5.—To abstain from drinking intoxicating liquors. (52) In addition to these precepts, tale bearing, slander, harsh and injurious language, envy and anger are prohibited, and the opposite virtues are recommended. Almsgiving is specially recommended, and the most excellent of all gifts is stated to be that of religious instruction. (53) Budha, however, only legislated for his priests; with respect to others he was only a Teacher, (54) His commands respecting the morals of the Priesthood are contained in the *Párájika* and *Pachitti* sections of the *Winiya Pitaka*. A digest of these laws, called *Prátimoksha* is directed to be read in each Chapter of the Order on the

(52.) පානාතිපාතා *pánátipátá* taking away life, 2 අදින්නාදාන *adinnádána* theft (lit taking that which is not given) 3 මුසාවාද *musáwāda* lying 4 මිච්ඡාමාර මිච්ඡාචාර *michchámará*, illicit sexual intercourse 5 සුරාමෙඝමත්තපබ්බතාන *surámeraya majjapamā datthāna*. The use of intoxicating liquor.

(53.) In the *Subhasuttan* in *Majjhamanikāya* Budha enumerates many a vice and many a virtue with their consequent reward.

(54.) Budha is called සත්ථාදේව මනුස්සාන *sattthā dewamanussānan*. Teacher of gods and men.

new and full moon in each month, when an enquiry is to be made respecting the morals of each priest. The laws respecting ecclesiastical discipline [are contained in the Maha Waggo and Chula Waggo of the Winiya Pitaka, but the subject is too large to be entered upon in this lecture. Great care has been taken to ensure the moral purity of the Priesthood, and to preserve peace and harmony between its members; with what success it is not easy to state. The distinctions of Caste are not admitted in the Priesthood. (55)

(55.) Budha says තප්පා වසලානොති තප්පානොති ව්‍යාත්තේ කම්මතා වසලානොති කම්මතානොති ව්‍යාත්තේ, na jachchá wasa lohoti najatchahoti brahmano kammanáwasalo hoti kammanáhoti brahmeno. By birth there is no chandála, by birth there is no Brahmano, by actions there is chandála, and by actions there is Brahmana.

When king Mádhura waited on the priest Mahákachchána and said, ව්‍යාත්තේ හෝ කඛ්‍ය ජව්වාහංසු ව්‍යාත්තේවසෙය්‍යෝ වරේණා හිතේ අඤ්ඤා වරේණා ව්‍යාත්තේව සුත්තො වරේණා කණ්‍යා අඤ්ඤා වරේණා ව්‍යාත්තේව සුප්ඤ්ඤාති යො අව්‍යාත්තේ ව්‍යාත්තේ ව්‍යාත්තේ දුතො ධරණො දුට්ඨො ජනා ව්‍යාත්තේ ව්‍යාත්තේ ව්‍යාත්තේ ව්‍යාත්තේ, brahmana bho kachchána ewamáhansu bráhmanáwa settho wanno hino anyo wanno brahmanáwa sukko wanno kanho anyo wanno brahmanáwa sujghanti no abbrahmaná brahmaná brahmuno puttá oraso mukhato játá brahmaja brahmanimmita brahma-dáyyádáti. "Venerable kachchána the brahmins say that (the Brahmins) alone are of high caste, other castes are low, the brahmins are of white caste, others are of black caste the Brahmins are pure, those who are not Brahmins are not so, the Brahmins are the only beloved sons of Brahma, they proceed from his mouth, begotten by Brahma, created by Brahma and are enheritors of Brahma." The Priest replied, ඉති හවං කඛ්‍යෙ කිඤ්ඤාති කොයො යව්වො ජයො මොරු ලොකස්මි, iti bliawan kachcháno kimahákti ghrosýewakho eso mahá rája lokasmin. "The Venerable kachchána said great king this declaration was only a sound in the world" and added, තං කිම්බෙදාසි මොරු මත්තියස්ස වෙවි ඉරෙකි යං බහෙතවා බෙදෙතවා රජතෙතවා ජනරාජතවා මතතිසො ජස්සාස්ස සුඛිබ්බාසි පථිවා නිපාති කිං කාර පථිස්සාති මනාපවා රියවා යති ව්‍යාත්තේ පස්සාස්ස වෙස්සො පස්සාස්ස සුද්දෙ පස්සාස්ස සුඛිබ්බා



The legends of Buddhism are numerous, many are contained in the Pansya panas Jataka book, and in the *Rasa Wahini*. (56) The Singhalese translation of these latter tales being contained in *Saddharma Alankāra*, I give a sketch of one of them exemplifying the pursuit of knowledge under difficulties.

---

## HISTORY OF DARMA SONDA.

---

Long after the doctrines of Buddhism had been forgotten and a comparatively short time previous to the appearance of another Budha, a desire to know what the doctrines of that religion were, sprang up in the minds of individuals. Among them was a King of Benares, named Dharma Sonda. After he was established in his kingdom, he became deeply impressed with the importance of religious knowledge. He

---

සි පබ්බතකිංකර භික්ෂු භික්ෂු භික්ෂු භික්ෂු, *tan kimmannasi mahārāja khattiyassa chēpi ijjheiya dhanēnewā dhannenawā rajāi tēnewā jātarūpenawā khattiyo piṣṣāssa pubbutthāyi pachchāni pṣṣi kinkāra patissāwi manāpachāri piyawādini brāhmano piṣṣāssa wesso piṣṣāssa suddo piṣṣāssa pubbutthāyi pachchānipāti kinkam patissāwi manāpachāri piyawādi.* "What thinkest thou grth, king, that if one of the khastrīye (warrior) tribe abounded in wealth, grain, silver and gold members of the khastrīya tribe rise befog him and go to bed after him, await his commands, behave according to his pleasure and use pleasant words, so do the Brahmins, *vaisyas* and the *suddras*, rise before him, go to bed after him await his commands, behave according to his pleasure and use pleasant words." (*MADEHURIYA SUTTAN MAJJHIMANIKAYA.*)

(56.) The *Pansiyapanasjātaké* (literally) 550 births, is the Commentary on the *Jātaka gāthās*. *Rasawāhine* forms no part of the sacred books of Buddhism. It is however written in easy but very elegant Pāli, and is generally the first book the Pāli student is required to construe.

thought much on the subject, and considered that a Prince without a knowledge of religion, was like a man, ornamented with jewels, but destitute of garments requisite for the purposes of decency. He communicated his thoughts to his councillors, and enquired if any of them could either instruct him or tell him where he could obtain information on this important subject. The noblemen of his Court acknowledged their inability to give their Sovereign the information he required. The King then directed the public crier to make proclamation, that if any individual could explain any of the doctrines of Budha he should be munificently rewarded, upon communicating his knowledge to the King. He afterwards sent an elephant laden with the most costly treasures, round the city, promising to bestow the whole upon any person who could communicate to him any portion of the teaching of a former Budha. Not meeting with success he afterwards offered to become the personal slave of any one who could recite to him only one stanza spoken by a Budha.

His mind became exceedingly agitated with this unquenchable thirst for religious knowledge, and he determined to leave his kingdom in charge of his Chief Ministers while he sought in foreign lands the information he so much desired. During his travels he entered a thick forest, and regardless of the fierce animals who dwelt there, entertained a hope that he should succeed in his efforts even in that unpromising place.

When a peculiarly meritorious act is performed by any person, the Crystal Throne of India (or Sakraya, the King of the Gods residing on the summit of Maha Meru,) becomes hot, and by this his attention is directed to the

circumstance. In consequence of the eminent merit of the proceedings of Darma Sonda, the throne of India became heated, and the God, perceiving the whole of the circumstances, determined to assist him. For this purpose he assumed the form of a fierce man-eating demon, and armed with a sharp sword and a massy club, and with blood dripping from his jaws, stood before the King. The Prince was unmoved by his fierce appearance, but hoping to obtain, even from him, the knowledge he so earnestly desired, courteously addressed him, saying, O thou who inhabites this delightful forest, I have left my kingdom in search of religious knowledge. Are you acquainted with any of the teachings of Budha? The demon replied, I know one stanza. Will you communicate it to me, said the Prince. What reward will you give to your teacher, asked the demon. Were I in my kingdom, observed the Prince, I would reward you most liberally, but in this forest I have nothing but my person to present to you. That will be sufficient, said the demon, let me eat you. But, asked the Prince, how can you instruct me after you have eaten me? And how can I teach while I am hungry, replied the demon. But I will propose a plan by which both of us may be gratified: and turning towards a rock perpendicular on one side and a yodun (about 14 miles) high, which he had miraculously formed, he said, Do you see this rock? Ascend to its summit, and I will stand here below. I will open my mouth wide, and you must leap from the rock into my mouth, and during your descent I will repeat a stanza spoken by a Budha. Agreed, exclaimed the Prince, and moralising as he went ascended the mountain. When he had gained the summit, he cried out, Demon, attend! teach

me while I make my leap : and so saying, he sprang from the rock towards the extended jaws of the demon : but Indra assuming his own proper shape, received the King in his arms, conveyed him to the summit of Maha Meru, and after having treated him with the highest respect, placed him upon his throne, and repeated the following stanza :—

අනුච්චාත ආබාත උප්පදා වයා දම්මිණ උප්පජිතවා  
නිරුජ්ජාති භෙත්ති වුප්පාමො සුඛො anichcha wata san-  
khára uppáda waya dhammino uppajitwa nirujjanti tésan  
wupasamo sukho.

“The component parts of human nature certainly are mutable : they are things produced and destroyed. Being born they cease to be : Happiness consists in their complete subjection.”

---

Many tales, equally improbable might be produced, but little of the doctrines of Budha can be derived from them.

It is hoped that the sketch of Buddhism contained in this Lecture will be found correct, as it is drawn from the most approved Pali authorities.

---

*Description of two Birds new to the recorded Fauna of Ceylon.*

*By H. NEVILL, Esq.*

---

The announcement that two birds have been discovered new to the recorded Fauna of the Island, which I to-day have the pleasure of making to the Society, is accompanied by circumstances rendering it noteworthy.

Both species are from the country round Nuwara Eliya, and both are already known as denizens of the Nilgherry Hills of the continent.

The first, a solitary snipe, possesses no great interest, as the birds of that genus are known to have a wide range; but the second, a Flycatcher of feeble flight, is one of those instances of the repetition of a species in isolated localities, that for the present are unaccountable, and act as a bar to all but idle speculation; and, as it is only by patiently and carefully tracing each link, that we can hope ever to find the original chains that bound our Island to the Continent or other tracts now covered by the sea, each species held in common between two such widely separated highland districts, brings us a step nearer to the original bond of affinity or source of community.

The Snipe, *Scolopax nemoricola*, Hodg., is found among low bushes at the edge of swampy Patina lands, and is scarce.

Its flight is similar to the first rise of the Woodcock, but it drops quickly, as that bird does at certain seasons; and hence it is very probable that the *Scolopax rusticola*, L., entered as a native of Ceylon in Sir E. Tennent's list of

birds, is no other than the present species. However, as *S. Rusticola*, L., has been frequently obtained in India, it is much to be desired that sportsmen would forward skins for identification.

The Flycatcher, *Leucocerca fuscoventris*, Frankl., affects the edges of jungle, living in pairs, though occasionally two or more such pairs associate, and perch on the top-most twigs of the brushwood, whence they flit after passing insects.

These, a *Pericrocotas*, and the Blue Creeper, *Denärophila frontalis*, Horsf., have a curious habit of accompanying each other in quest of food; probably the two former follow to catch the insects started from moss and lichen by the active Creepers, though possibly they merely unite to guard better against the swoop of the Hawk and Kestrel.

Whichever it may be, this peculiarity struck me most forcibly, when sitting hidden among the hills, I have gazed at the dark and lifeless shade around, and been almost startled by the noisy twittering of the three allies, exploring the recesses of the old *Rhododendron* trees above me before passing on to other haunts, leaving the forest as silent as before.

I append a very brief description of each species for information of any one who may take an interest in our Ornithology.

*Scolopax Nemoricola*, Hodg.

This species is very similar in general plumage to the common snipe, *Gallinago gallinula*, L., but may be at once distinguished, by the whole of the plumage beneath being barred with dusky brown.

Mr. Hodgson remarks, "its general structure is that

of a snipe, its' bill a woodcock's, and the legs and feet are larger than in *Gallinago*."

Length,  $12\frac{1}{2}$  inches, Extent 19—of wing,  $5\frac{1}{2}$ —bill  $2\frac{1}{2}$  tarsus,  $1\frac{1}{2}$ —Weight, 6 oz.

*Leucocercae fuscoventri's Frankl.*

Plumage above, dusky black—head, cheeks, and chin, black. Beneath, white, somewhat tinged round the vent and under tail coverts. Breast, broadly banded with mingled black and white Tail dusky, lighter (save on the central feather) at the tips. Irides brown. Bill and legs, dark.

Length  $6\frac{3}{4}$  inches—wing, 3—tail,  $3\frac{1}{2}$ .

This species may be at once distinguished from *L. compressirostris*, *Blyth*, by its breast band, which resembles in colour the fur of the Chinchilla.

---

*Description of a New Genus and five new Species of Marine  
Univalves from the Southern Province, Ceylon.—By  
G. NEVILL, C. M. Z. S., and H. NEVILL, Hon. Sec.  
R. A. S. (C. B.), F. Z. S.*

---

ROBINSONIA, N. G.

Typ : *R. Ceylanica*, G. & H. Nev.

Testâ naticoides, imperviâ ; anfrac : paucis, descendenti-  
bus rapideque grandescens ; spirâ elevatâ ; aperturâ  
latâ ; collumellâ simplici, subcrassatâ ; labro callo tenui  
adjuncto.

---

*Robinsonia Ceylanica*, n. s.

Testâ diffuse ventricosâ, non nitente ; spirâ acutiori ;  
anfrac : 4, rapide tumentibus, longitudinaliter obscure  
striatis, convexis : juxta suturam, anfractûsque ultimi par-  
tem inferiorem, albescente ; collumellâ albidâ, aperturâ  
interne fuscente.

Long 7-16th unc. Lat. 3-8th unc.

Hab. Mátara, Ceylon.

---

*Robinsonia pusilla*, n. s.

Testâ ovatâ, spirâ acutâ ; anfrac : 4. convexis, longitu-  
dinaliter subtilissime striatis ; albidâ, castaneo varie fas-  
ciatâ ; aperturâ pyriformi, fasciis interne perspicuis.

Long.  $\frac{1}{4}$  unc. Lat. 3-16th unc.

Hab. Balapitiya, Ceylon.



*Pleurotoma (Mangelia) Boakei, n. s.*

Testâ fusiformi-oblongâ, utrinque attenuatâ, subopacè nitente, costis propinquis lævibus longitudinaliter costatâ, interstitiis striis subtilissimis decussatâ; fulvo-albescenti, anfractûs ultimi parte inferiori, (intus conspicue) castaneâ, superiori castaneo bifasciatâ; anfract: 7. convexis, ad suturam abrupte convexim incurvatis, sinû indistincto, labro externe incrassato, albido, intus minute crenulato.

Long.  $\frac{1}{2}$  unc. Lat. 3-16th unc.

Hab. Balapitiya, Ceylon.

---

*Pleurotoma curculio, n. s.*

Testâ pyramidalî, longitudinaliter nodoso-plicatâ, transversim forte costatâ, albidâ, juxta suturam basemque castaneo ligatâ, aperturâ crenulatâ, castaneâ, labro externe incrassato, anfractibus 5. paulim convexis, sinû indistincto.

Long.  $\frac{1}{4}$  unc. Lat. 1-10th unc.

Hab. Balapitiya, Ceylon.

---

*Pleurotoma lemniscata, n. s.*

Testâ ovatâ, spirâ brevi; anfractibus 8. longitudinaliter nodoso-plicatis; solidâ, fulvâ juxta suturam basemque cinereo ligatâ, fasciisque 2. castaneis in anfractû ultimâ ornâtâ, apertura fortim crenulatâ, labro externe incrassato, sinû rotundato, fasciis interne conspicuis.

Long.  $\frac{3}{8}$  unc. Lat.  $\frac{1}{8}$  unc.

Hab. Balapitiya, Ceylon.

May 7, 1869.

---

*A brief notice of ROBERT KNOX and his companions in captivity in Kandy for the space of twenty years, discovered among the Dutch Records preserved in the Colonial Secretary's Office, Colombo, and translated into English, by J. R. BLAKE.*

---

The Dutch Records preserved in the Colonial Secretary's Office consist of a great number of volumes and embrace a vast variety of subjects. The curious investigator will have his labours amply rewarded by the rich store of materials which those records will furnish on almost every given subject; historical and political; educational and ecclesiastical; foreign and domestic; despatches to Holland and Batavia; official letters civil and military; reports concerning tanks and cultivation, pearls and cinnamon; instructions to Dissávas; terms of contract with natives; treaties with foreign powers; sailing directions for India-men, and orders of battle for ships of war, &c. &c. Intermingled with these and other important matters, one will not only meet with a very orthodox Protestant catechism for young people, but what also may have been regarded by the sedate Dutch matrons of the period as equally orthodox and important, a recipe for the making of beer!—not indeed the veritable beer of Europe—the offspring of malt and hops—but some colonial invention, and designated either *Klein bier* or *Zet bier*. The brave soldiers of the garrison of Colombo were found to be poisoned by abominable mixtures sold in the market under the respectable

name of beer; the supply ships from Holland used to arrive only once in a twelve-month; and the soldiers, like all brave warriors of ancient and modern times, would have their beer. It is no wonder then, that in going over the multifarious records of the Dutch period, that I happened to light on a notice of ROBERT KNOX and his companions in the sad state of their captivity.

The first notice that I happened to discover is to be found in the 2nd volume of the Dutch records, in a Minute of Council, dated Saturday, 18th September, 1660. In this document mention is made, not indeed of the arrival of the frigate *Ann* (which was commanded, as is well known, by Captain Knox, senior) at the Bay of Cottiar, but of its sudden departure, "sailing away from Cottiar, and leaving her Captain and some of the crew in captivity among the Kandians." The Government is also informed by the authorities at Trincomalee, that the crew of the English vessel had come on shore at Cottiar, cleared the jungle, and cut palisades with great labour and trouble, with the view of erecting a fortification; and that a raging fever had made great havoc amongst them, sweeping away nine of them, and leaving twenty-five in a miserable condition. The Council express their astonishment on hearing these things, and appear to be at a loss whom to blame the most, whether the Kandian monarch, whom they suspect of bad faith, or their good friends and allies the English; and finally resolve to adopt effectual measures for securing the island against foreign invasion, and guarding against the treachery of *Rajah Singha*. The next notice occurs in the 7th volume, where we find a Minute of Council, dated Monday the 21st, and [Thursday] the 24th October, 1669, which an-

swers to the 10th year of Knox's captivity. This Minute is as follows:

"By the Englishmen who, some years ago, came on an embassy to Cottiari, and were carried captive by *Rajah Singha*, and have to the present time been forcibly detained, an ola, inscribed in English, and secretly despatched in the hands of a Malabar named *Perga*, for the purpose of being conveyed to Madras, having been handed by the said bearer to His Excellency the Governor, it is translated and reads as follows:

"HONORED SIR EDWARD,

"In the year 1664, we received a packet marked 61, and particularly addressed to us, which is all that we have received, although Mr. Vassal\* has received some, but concealed the fact from us, and money too, which we have not once received, though our neediness is so great. Our comrades are all still alive and in health. Only Arthur Emery, the Captain, and John Gregory are dead. There are twenty-three of us alive at present, who would be glad to regain their liberty. As for news, we dare not write any, fearing that our note may be intercepted or miscarried: and we refer you to the bearer, Perga, who can inform you of all that has passed better than we can write. He has hazarded his life in carrying this. We intreat you to

---

\* This man, Mr. William Vassal, was one of the crew of the ship "*Persia*," wrecked upon the Maldives in the year 1658. They made their way in boats to Ceylon, but upon landing to recruit and buy provisions, were set upon and captured by the natives. Knox gives particulars about him and his companions in ch. 4, part IV, of his account of his captivity.

reward him liberally. The Dutch are not so careless as to let him pass unperceived. If you can by any means send some assistance, as the bearer Perga can direct you, to us poor afflicted captives, we shall not cease to implore for you long life, health, and prosperity, while we remain your Honor's servants.

(Signed) JOHN LOVELAND,  
ROBERT KNOX."

The writing in the margin, is as follows: "Zealand, 21st August, 1669." The direction was, "Into whatever good Christian hands this note shall come, we pray, for God's sake, to aid in forwarding it."

This translation having been read, the Minute proceeds to state:—

"With reference to the forementioned ola, it being considered that we and the English nation are not only neighbours, good friends and allies, but especially also of the same religion, and are consequently so much the more obliged in conscience, among other things to afford them help in their necessity, so far as the circumstances of time and place permit, in a more especial manner at present, when the aforesaid bearer is persuaded by His Excellency to go up again, in order to carry to them some relief and return with further intelligence, it is, for these and other weighty reasons, (and also that we may hereafter send through the same some support to our own poor countrymen,) found good and understood, to send back the said ola-bearer, with a sum of 50 gold pagodas for the maintenance of our aforesaid good friends and allies, and as much of clothing

as he may dare, and can conveniently, carry on his shoulder as a chitty, and also a note written in English as well as in Dutch, enclosed in a quill, and containing as follows :—

“ To all our good friends and dear allies, the honorable officers, and captives of inferior rank of the English nation.

“ Being informed of your great need and wretchedness, we cannot refrain from performing the Christian duty of assisting you with such articles of clothing as the bearer will deliver to you, together with 50 pagodas ready money. We have sent to Madras the ola addressed to Sir Edward, as well as a copy of this. Send back the bearer as soon as possible, that we may see whether through his fidelity, we could, to some extent, assist such of our own countrymen as are suffering great want [like yourselves]. Hold communication with us through him, for we will always help you by the bearer, so long as he shall be preserved by God, and be successful. We remain, your good friend,

RYKLOFF VAN GOENS.”

“ Colombo, 22nd October, 1669.”

After this the Minute proceeds in the following strain.

“ And since we find ourselves obliged to forward the ola to Madras as early as possible, to the end that the friends of these men there may become acquainted with the condition of their poor countrymen, it is resolved to send the forementioned ola, by the first opportunity, to Mr. Paviloen, Governor in Coromandel, who shall thence forward it to Madras, together with a despatch to the English authorities there, conceived in the following terms :—

"To His Excellency the Governor presiding at Madras on behalf of the Honorable Company of the illustrious English nation.

"SIR,

"Three days ago, a black man, calling himself Perga, appeared before me in Colombo, and placed in my hands the accompanying note written on the leaf of a sugar tree,\* and from it Your Excellency will learn the wretched state of your people, and their great necessity, which permits not of being any longer neglected. We have assisted them with some clothes, and 50 pagodas ready money, which the abovementioned Perga has undertaken to convey to them without fail, and return, on a promise of a reward of 20 pagodas; and we hope we shall always be able by means of him, to help both your people and ours. I have enquired of the black, Perga, after the condition of both, and understood him to say that 23 Englishmen are still alive, namely,

|   |   |                       |   |                     |
|---|---|-----------------------|---|---------------------|
| 4 | { | Captain JON LOUBLING* | { | These four are in a |
|   |   | " ROBERT KNOX         |   | village beyond Kan- |
|   |   | " JOHN BERRY          |   | dy named Legonder-  |
|   |   | " WILLIM DEI†         |   | ry.                 |

5 Persons under the command of Mr. Markes, who were stranded at Calpentyn, are living in the town of Kandy.

4 Persons in Zalimoer, a division of the town of Kandy.

4 Persons in Oere Noere, another division of Kandy.

\* The *Caryota Urens*, or Jaggery tree, or *Borassus flabelliformis*, the Palmyra or Fan palm.

\* Perhaps *John Loveland*.

† *William Day*.

3 in the King's court.

3 in Bulatgamme, a third division of Kandy.

23 in all, both of officers and common people. Of our people there are living 18 or 20 persons out of 64, the rest having been put to death, after being distributed, like your own people, in the King's Court and in other places round about Kandy. One of your people was lately put to death for having broken a porcelain dish in the palace. We hope that God will at length be moved with compassion, and make provision for the release of these wretched men. We shall all take great pains to attain this end, seeing that we are now, (praise God) arrived so far by our outposts that we can reach both your people and ours in two days. But the whole of the way lies through dense jungles, and over wild mountains, which we may pass more by wariness, consideration, and secrecy, than by violence. Let me assure you that we will not be remiss, but attempt every thing in our power to bring out both your people and ours, without distinction, from their captivity. May God Almighty, whom we ought to pray to and call upon, bless this resolution! A copy of the letter which we have written to your people in reply to their ola note in our tongue, with its translation into English, accompanies this. God preserve your Excellency. I remain, Sir,

“Your Excellency's good Friend and obedient Servant,  
(Signed) RYKLOFF VAN GOENS.”

“Colombo, 23rd October, 1669. New style.” ‡

---

‡ It was necessary for the Dutch Governor to subjoin new style, as the English were using the old style, and did not adopt the new till the year 1752. According to the old system, the date would have been 13th October.



This interesting document stops short here. That there was no sequel may be conjectured from this consideration; that, from the state of those troublous times, nothing further could have been effected.

The recipe for making *Klein Bier* (literally, small beer) alluded to above is as follows:

For making 25 gallons.

.....lbs of sugar.

6 Measures of roasted paddy.

8 handfuls of the leaves called by the Siphalese  
*Manoecocke*.\*

4 handfuls of Marygosa †

3 handfuls of lemon leaves, or of orange or lemon  
peel.

These ingredients are to be boiled down together to a fourth part, then strained through a cloth into a vessel of 25 gallons capacity, which, being further filled with cold water, lees of [beer] or toddy, to produce fermentation, is to be left fermenting two days on its lees, and then poured out into another vessel, and, after the lapse of two days and pouring it out into a third vessel, it may be kept for some time, if covered over with earth or soda."

---

\* Leaves of the Margosa tree. (*Melia Azidarachta Indica*)  
Siphalese *Kohomba*.

† Called at the present day *Pengiri-mána*, i. e. lemon grass.

*A Summary of the Contents of the First Book in the Buddhist Canon called the Párájika Book.—By the Rev. S. COLES.*

---

THE subjects of the following paper are extracted from a portion of the Canonical Books of Buddhism, which, as far as we know, has not generally been unfolded to Oriental scholars and philologists. It is well known to all whose investigations have been carried on in this direction, that the Canonical Books of the Buddhist system have a three fold-division, and are designated the Tun Pitakas, or The three Caskets. The first of these is called the Winiya Pitaka, from the root "*Ni*" "to guide," with its intensive prefix "*Wi*," and signifies, *propriety, good conduct, or discipline*; and it is in this latter sense especially that this word is used as a distinguishing epithet to the first five books of the Buddhist Scriptures, which entirely belong to the Priesthood, and contain injunctions and regulations relative to their moral and official course of actions. And inasmuch as the contents of these books afford us information on Buddhism as it practically existed in the time of its founder, we are bound to examine them carefully and impartially, to see whether the theories advanced in the Sutta Pitaka, the portion delivered to the laity, and which contains the doctrines of Buddha, are there maintained. It is well known that as to its doctrines, Buddhism is a system of Atheism, since, according to its tenets, there is no Creator nor Preserver of the Universe; no one to reward the virtuous or punish the ill-doer; but that every animal is ever serving under one master—"Kamma," *the fruit of actions*; and that every state which he arrives at is determined by his previous deeds. Buddha never rewards nor punishes. He was only the Teacher, and declared that

obedience to his commands would, *ipso facto*, bring a reward superior to that of all other religions.

With regard to these moral precepts it must also be borne in mind, that they are not exclusively Gotamo Buddha's; in fact it may be doubted whether he even laid claim to originating any one of them. He himself declared that his Dhamma (doctrine) was like that of the former Buddha's; which evidently means that he learnt it from other religious teachers of his time, especially the Brahmins; and a very superficial glance at the Vedas and other books of the early Brahmins will convince any one that Gotamo, in addition to his inward monitor, that judge of right and wrong, had ample materials around him, to mould up into a religion, so far resembling Brahmanism as not to make it unnecessarily distasteful to the populace, and at the same time so different, that he might hope to break the yoke of the Brahmin priests, which was galling to the people, but more especially to the kings. It would be interesting to note how far the parallelism extends in the case of North Indian kings favouring Buddhism in order to rid themselves from the pretension of the Brahmins, and that of the monarchs of Western Europe countenancing the Reformation in the fifteenth and sixteenth centuries, so that they might deliver themselves from the yoke of Rome; but we must haste on to the consideration of the matter now before us, and remind our readers that as regards his Dhamma,—the doctrines revealed in the Sutta Pitaka,—Buddha claimed no authority except that of a kind of temporary omniscience, possessed by him only at such times as he wished, by means of which he declared the four paths of virtue, with their fruition, and the *summum bonum*, Niwan.

But when we descend to the Winiya Pitaka, Buddha appears to us in a new light. He is there the Primate and

Chief Shepherd of the Buddhist Church—the master of his servants the Bhikkhus (priests) and the Father of his clerical family. He claims here the power not only to legislate but also to execute, and was the judge to give sentence when any one of his laws had been violated. The remarkable feature in these laws however is, Gotamo never legislated for the Bhikkhus until some one of them had committed an act in direct opposition to the general tenour of the religion.

The name of the first book in this division is the *Párájika* Book, from the root “ji” to conquer; with two prefixes, “para” and “a,” the former meaning *other, foreign, &c.*, and the other a particle of negation. Consequently, the meaning of the whole is *overcome or defeated*. There are four *Párájikas* or *defeats* mentioned in the book called *Methuna Dhamma Párájika*, *Adinna Dána Párájika*, *Manussa Wiggaha Párájika*, and *Uttari Manussa Dhamma Párájika*, and the meaning of each of the several terms is:—The cohabiting *Párájika*; the taking of things not given *Párájika*; the man-tormenting *Párájika*; and the assumption of superhuman powers *Párájika*; or, more briefly, cohabitation, theft, murder, and the unwarranted assumption of superhuman powers and faculties.

The nature of a *Párájika* fault is thus defined by Buddha; සෙසයථාපිනාම සිසඤ්ඤානා අභබ්බො තෙන සරීරං ඛන්ධෙන ජීවිතුං ඵලමෙව භික්ඛු මෙට්ඨිනං ඛමං පතිසෙවිතො අසමනොහොති අසකාස පුත්තිසො තෙන දුම්මති පාඨජිකා හොති. *Seyyathápi náma sisachchinno abhabbo tena sarirap bandhanena jiwitup Ewamewa Bhikkhu methunap Dhammapatisewitwá assamano hoti asakya puttiyo tena wuchchati párájika hoti.*

“As one who has been decapitated is unable to live by tying the head to that body, so a Bhikkhu who has been guilty of the *Methuna Dhamma* fault becomes excommunicate

and a non Sakya son. On this account he is said to become guilty of a *Párájika* fault."

Again; සෙය්‍යථාපිනාම පඤ්චපලාසො ඛන්ධනා පටුතොනා අභබ්බො හරිතනනාය එවමෙව භික්ඛු පාදංවාපාදුරහං අති රෙන පාදංවා අදිනනං ථේය්‍ය සංවාතං අදිසිවා අස්සමනො හොති අසක්‍ය පුතතිශො තෙනවුච්චති පාරජිකායොති. Seyyathápi nama pandupaláso bandhana pamutto abhabbo haritattaya. Ewamewa Bhikkhu Padaṇwa Padarahaṇ atireka Pádaṇwá adinnaṇ theyya sankhátan ádiyitwá assamano hoti asakya puttiyo. Tena wuchehati *Párájika* hoti.

"As in any way when a yellow leaf has fallen from its stem it cannot be again made green, so any Bhikkhu with a dishonest purpose having taken a thing not given, to the value of a *Páda*, its equivalent, or more than a *Páda*, becomes excommunicate and a non Sakya son. On this account he is said to become guilty of a *Párájika* fault."

Again; සෙය්‍යථාපි පුඤ්ඤිලා වෙධානිනනා අල්පජිහත්තිකා හොති එවමෙව භික්ඛු ඤ්චිච්ච මනුස්ස චිත්තං ජිවිතාවො රෙපෙචා අස්ස මනොහොති අසක්‍යපුතතිශො තෙනවුච්චති පාරජිකා හොති. Seyyathápi puthusíla wedhá bhinná appatisandhiká hoti. Ewamewa Bhikkhu sanchichchha manussa wigghaṇ jiwitá woropetwa assamano hoti asakya puttiyo. Tena wuchehati *Parajika* hoti.

"As in any way a perforated and broken rock cannot be re-united, so any Bhikkhu with the purpose of tormenting man having taken away life, becomes excommunicate and a non Sakya son. On this account he is said to become guilty of a *Párájika* fault."

4thly; සෙය්‍යථාපිනාම නාමලුතිකාවර්තනො අභබ්බො පුතවිරුද්ධිකායා එවමෙව භික්ඛුපාපිවෙණ ඉත්තපකතො අසනං අභුතං උතාරිමනුස්සධම්මං උලලිචා අස්සමනො හොති අසක්‍ය පුතතිශො තෙන වුච්චති පාරජිකායොති.

Seyyathápináma thálamatthakáchchinno abhabbo puna wirulhiyá. Ewamewa Bhikkhu pápichchho ichchápakato asantap abhutaṃ uttari manussa Dhammaṃ ullapitwa assamano hoti asakyaputtiyo. Tena wuchchatī Párájika hoti.

“As in any way when the head of the Palmyra has been cut off it cannot be raised to the same place, i. e., re-united, so a Bhikkhu with a sinful and premeditated desire having declared that he possesses the Uttari Manussa Dhamma (Superhuman powers) which does neither belong to him nor exists (as far as he is concerned), becomes excommunicate and a non Sakya son. On this account he is said to become guilty of a Párájika fault.”

From the above extracts it is evident that a Párájika is an irremediable breach of discipline, and its meaning is that any Bhikkhu who has thus become guilty can never in this life become an Upasampadá (superior) priest. Beside the Párájikas there are lesser faults, the nature of which is determined by various causes, as will subsequently appear. These are Sanghádisesa, Thullachchaya, and the Dukkata faults, and can all be easily remedied, the two latter especially, as after a fault of this kind has been committed, the culprit has only to confess to his Upajjhá (ordaining priest) without much delay, and is then exempted from all evil consequences; but the Sanghádisesa being more serious (about half of a Párájika) a course of penance has to be submitted to, and confession without delay made to 25 superior Bhikkhus. The nature and extent of these penances are not defined in the first book of the Winiya Pitakas, but in others, to which reference will be made when those books are brought under consideration. Suffice it to say, that they can possibly have no deterring effect on crime, but rather form loopholes through which most enormous and disgusting misdeeds may be committed, and yet the perpetra-

tor may remain not only as a Buddhist, but a Bhikkhu; and what is more remarkable is, that crimes the most abominable were judged to be less heinous than others for which some possible excuse might have been pleaded on account of natural desires and the force of temptation.

But we must leave it to all intelligent readers to draw their own conclusions from premises which we will advance, by giving a succinct and faithful account of the contents of the *Párájiká* book.

This book opens with an account of Gotamo Buddha's disputation with Weranja Brahman, who accused the former of being an uncivil, destitute, unpractical, scoffing, domineering ascetic, and barren person. Buddha accepted all these epithets, but dexterously changed their signification so as to declare by them the nature of his religion, and explained how he arrived at the Buddhahood. The Brahman became a convert, and requested Bhagawá, the blessed one, (the title of Buddha used almost exclusively in this portion of the Buddhist Scriptures) to come to his neighbourhood and pass the Was (rainy) season there. Bhagawá assented and Weranja Brahman departed.

An account is then given of the manner in which the Great Moggallano, one of the especial favourite Bhikkhus, desired to overturn the surface of the earth, that he might provide the Bhikkhus with the edible crust of honey to be found beneath. Bhagawá objected to this, saying, "It will disturb the animal creation if such be done."

Another favourite Bhikkhu, Sariputto, asked Bhagawá, why it was that the Brahma chariya, (state of celibacy,) enforced by some previous Buddhas, lasted for only a short time; and why that of others was of long duration. Bhagawá answered, that the first mentioned Buddhas were easily discouraged, and enunciated their Brahma chariya before the proper time; and

this caused a speedy declension; the others were however more wary and successful.

At the conclusion of the Was season, Bhagawá informed Weranja of his intention to depart, and went to various cities and provinces. It is difficult to surmise as to what could have been the purpose of inserting the above mentioned matters in the commencement of the book, as they appear to have no connection with the name nor general subjects therein contained. I have thought it possible, that Bhagawá, if the order of the subjects may be ascribed to him, from the brief mention of former Buddhas having promulgated, some at the proper time and some prematurely, their laws and discipline, wished to intimate that his system could not be declared till the fit opportunity had arrived.

We next come to the subject matter of the book, the four Párájikás; and first in order is the Methuna Dhamma Párájiká. This commences with an interesting story of Sudinna, the only son of a wealthy Chetty who became a Bhikkhu, relinquishing his possessions, and forsaking his wife before she had any child. Shortly after he was very much persuaded by his relatives to come and dwell with them again as a layman; but being invincible on this matter, they requested that he would only cohabit with his former wife, so as to preserve the family name and possessions from extinction. After much persuasion, he thus far consented, and in due time a child was born; but the whole course of nature was disturbed at the deed, and the gods of the upper and lower worlds were greatly moved. Sudinna was called into the presence of Bhagawá, and severely reprimanded, but he endeavoured to excuse himself because the injunction prohibiting cohabitation with women had not yet been delivered. Bhagawá then reminded him that there was the Dhamma in existence condemning evil desire, hatred, and



ignorance, the three-fold sources of all evil; and issued his First Párájiká injunction, declaring that if any Bhikkhu should cohabit with a woman, he became guilty of a Párájiká and excommunicate. It must be remembered that Sudinna was exempt from this, as his fault was committed before the injunction was given. The Bhikkhus however were not slow in discovering a way of evading this enactment, and one of them in Wesali, (probably Oude,) cohabited with a female monkey, and afterwards excused himself by saying that the previous injunction was given with regard to women and not beasts. Bhagawá then declared that he henceforth prohibited cohabitation with beasts.

One would be inclined to think that the matter would have been finally settled here; but no, Bhikkhus disrobed themselves for the nonce, and as laymen satisfied their brutish appetites. Men with men, men with demons, with neuters, with Hermaphrodites are reported to have done those things which it is a shame even to speak of. Every possible plan was frequently employed to evade the enactment, and yet satisfy the more than brutish desires; and when their ingenuity was exhausted with regard to the living, the Bhikkhus turned to the dead, in order apparently to prove to their master that howsoever his enactments might abound, their sins could still keep ahead, and they could discover loopholes of escape. If the corpse was free from decay the fault was a Párájiká, but if not it was only a Thullachchaya or Dukkata. Several instances of the latter are enumerated as having been committed with skeletons, skulls &c.,\* but these were declared to be only minor faults and easily

---

\* Tena khopana samayena aññataro Bhikkhu siwathikaṃ gantvā ye bhuyyena khayitaṃ sariraṃ passitwa tasmīṃ Methunaṃ Dhammaṃ patisewi. Tassa kukkuchchaṃ ahoṣi. Anapatti Bhikkhu Párájikassa. A'patti thullachchayassati.

Tenakhopana samayena aññataro Bhikkhu siwatikaṃ gantvā chhinna sisāṃ passitwā wattakate mukhe achchupatta aṅgajataṃ pawe

atoned for. Very many instances are given of the Bhikkhus submitting to a little gentle violence, and afterwards declaring to Bhagawá that there was no volition on their part. He declared that then there was no culpability.

The account of the four Párájikás does not occupy more than half of the book of that name, the remainder being devoted chiefly to details, with the greatest minutiae, of sins of self-defilement, onanism, and its kindred abominations; because in the eyes of the Great Teacher, the pure and sanctified Bhagawá, they were less heinous than cohabiting with one's former wife, or stealing an article to the value of a páda.

There are many reasons for believing that this book contains, on the whole, a true account of events which actually did take place. There are very few instances of oriental exaggeration, as found in the Commentaries, to be met with here. Bhagawá has generally only 500 Bhikkhus with him, who live and act in a manner which we know exists in India. The locality in which the various deeds were done is very limited, and the crimes mentioned are in many cases those which are peculiar to such semi-civilized countries.

The Second Párájiká, called Adinna dána Párájiká relates to stealing; and here too the enactment was preceded by a crime which compelled Bhagawá to declare that henceforth such deeds should be denominated Párájiká faults. The crime mentioned was as follows:—A Bhikkhu, the Venerable Dhaniyo, was much troubled by grass women and collectors of firewood,

---

Tassa kukkuchchaṇaḥosi. Anápatti Bhikkhu Párájikassa. A'patti Dukkhaṭṭaseṭhi.

Tenakhopana samayena aññataro Bhikkhu aññatarassa itthiya paṭibaddha chitto hoti. Sú kálakata. Susāne chhaḍḍitā aṭṭhikāni wippakittá honti. Athakko so Bhikkhu siwatikaṇ gantwá aṭṭhikāni saṅkaḍḍitwá nimittena aggajataṇ paṭipájesi. Tassa kukkuchchaṇaḥosi. Anápatti Bhikkhu Párájikassa. A'patti Dukkhaṭṭaseṭhi.

who several times destroyed his hut and made off with the materials, while he was absent begging. To prevent the recurrence of this, he resolved to make use of his knowledge as a potter, he being of that caste, and formerly very expert in his profession, and erect a house, like the tub of Diogenes, similar to a water vessel, of only one piece, from clay burnt hard. His efforts were crowned with complete success, the house was completed, was of a brick red colour, and sounded like a bell when struck; but the poor man had scarcely finished his work and gone off to collect alms, when Bhagawá saw the strange structure and enquired whose it was. Being informed that it was built by the Venerable Dhaniyo, one of his Bhikkhus, he exclaimed "Go, O Bhikkhus! and smash it."

Shortly after the owner returned, and his chagrin may be more easily imagined than described. Bhagawá severely censured him, because by such actions damage would be done to insects, worms, &c. Dhaniyo then had recourse to an old friend, a conservator of the royal forests, and requested him to supply him with timber suitable for a wooden house. The keeper declared his inability to give without permission from the king. Dhaniyo said, "I have permission," and took some timber which was near a certain city. The timber was missed, and the conservator called to account for it. On his way to trial he was met by the Venerable Dhaniyo, who promised to haste to the king, and explain the matter; otherwise the conservator might lose his life. He accordingly went and reminded the sovereign of Mágadha Seniyo Bimbi Saro, that when he was crowned, he promised to all ecclesiastics "firewood, grass and water." The king acknowledged this, but replied that by the promise of firewood, timber was not included, and severely reprimanded the Bhikkhu for his dishonesty. People in general took up the matter, and the whole company of Bhikkhus was charged with

pilfering and theft. Bhagawá speedily collected his Bhikkhus, censured Dhaniyo, and declared, that if any Bhikkhu with a dishonest purpose shall take a thing not given, he shall become guilty of a Párájiká and excommunicate. Several hundreds of instances are then given of the Bhikkhus evading or endeavouring to evade Bhagawá's enactments, by taking goods from places which he had not then specified, or of such a value as not to come within the definition of the Párájiká fault. Thus when Bhagawá had prohibited taking things in the jungle, the Bhikkhus took from the villages, and when that had been prohibited, they said the command applied only to things on the ground, and took those which were on a table or any other article of furniture; things suspended in the air, in the water, &c. The Páda is mentioned as the value necessary to make the fault a Párájiká. This was a coin of gold or silver equal to five māsas, the latter weighing about  $4\frac{1}{2}$  grains each.

There are three degrees of guilt mentioned as connected with stealing any article:—(1) Approaching, examining and feeling with a dishonest purpose the property of another is a Dukkata fault; one only requiring confession to a superior Bhikkhu.

(2.) Shaking the article is a Thullachchaya fault, only a little greater, and atoned for by confession.

(3.) Removing it from its place is a Párájiká.

We now proceed to give a brief summary of the Third Párájiká, called Manussa Wiggaha Párájiká, which relates to murder. This too opens with the story of Migalandaka Bhikkhu, who, for the purpose of appropriating to himself the bowl and robes of the Bhikkhus, went about sword in hand and promised any one who wished speedy deliverance from this evil world and admission into a better, to fulfil their desire by the weapon he carried about with him. It seems that

many believed his word, for he succeeded in disposing of the lives of 60 Bhikkhus before Bhagawá returned from a season of meditation in the wilderness. On his arrival, Buddha in a long discourse descanted on the moral benefits to be derived from slow and systematic breathing, and at its close severely reprimanded Migalandaka for his wholesale murders, and declared, that if any Bhikkhu wittingly take away the life of a man, or take a weapon in his hand for that purpose, he becomes guilty of a *Párájiká*. Afterwards some Bhikkhus who had become attached to the wife of a sick devotee, assured him that death was far preferable to life, as by its means he would enter on a state far superior to any he could possibly anticipate here. He listened to their advice, refused food and medicine, and died. His widow however spread an ill-report of the Bhikkhus, and Bhagawá declared, that if any Bhikkhu henceforth persuade a man to die, he shall be guilty of a *Párájiká* fault and excommunicate.

A vast number of instances are then given of Bhikkhus taking away life, yet so as to evade previous prohibitions, and in many cases they were successful. Thus, a Bhikkhu ordered a Bhikkhu, saying, take away the life of such an one. "This is a *Dukkata* fault. He, mistaking his victim, murders another man. The originator is not guilty, but to the perpetrator there is a *Párájiká*.

Again, A commands B to tell C to tell D to tell E to take away the life of F. This is a *Dukkata* fault. E consents; this is a *Dukkata*. E kills F; the originator is not guilty; but to D and E there is a *Párájiká*.

These two instances, extracted from a large number, are quite sufficient to enable us to estimate the standard of morals which Bhagawá established for the Bhikkhus, and which they very frequently sought to evade.

The fourth *Párájiká*, is called *Uttari Manussa Dhamma Párájiká*, or the false assumption of the powers of *Rahatship*.

Here too we have a story of *Bhikkhus* finding it difficult to obtain a sufficiency by alms-asking, except they could lay claim to supernatural powers; and so they agreed that they should say of each other that such an one was arrived at the 1st *Jhána*,\* another at the 2nd, another at the 3rd, and another at the 4th. Such an one was come to *Sota*, another to *Saka-dájama*, another to *Anágámi*, and another was a *Rahat*; the several states approaching *Niwan*. This plan perfectly succeeded, and the people brought many offerings; but *Bhagawá* when he had called them and made inquiries, declared, that if any *Bhikkhu* for the sake of gain shall henceforth thus act, he will become guilty of a *Párájiká*. It is unnecessary to adduce instances of the ingenuity of the *Bhikkhus* endeavouring to transgress this command; they are quite equal in number to those enumerated in relation to the first three *Párájikás*.

I proceed to give a translation of a portion of the *Párájiká* book. I have in this translation given as literal a rendering as possible, not because it is the best form, but because it gives the mode of thought and expression found in the *Páli* language. This will be appreciated by the philologist, as it will enable him to make comparisons between this and other languages, and the tyro in *Páli* will be much assisted in understanding the composition of sentences in this language.

---

\* A state of superior knowledge, of which states there are four. See *ante*, p. 94, *et seq.*

*Translation of the Párājiká Book.*

---

WORSHIP to him (who is) the Blessed, the Sanctified, the True, the Omniscient Buddha.

At that time Buddha the Blessed one dwelt in Weranja, at Naleru, near the root of the Margosa tree, with about 500 of the assembly of the Excellent Bhikkhus (1). Weranja Brahman heard that the Religionist, the truly blessed Gotamo, the son of Sakya (2), of the Sakya family, having become a religious ascetic, lives at Naleru in Weranja, at the root of the Margosa tree, with about 500 of the assembly of the Excellent Bhikkhus. There is such a good and high report (concerning) Gotamo, the Blessed. And so this Blessed one (is a) Saint, a True one, and Omniscient, Proficient in Wisdom, and arrived at a virtuous disposition. He who knows the world, who is the subduing charioteer of men, the Teacher of gods and men is Buddha, the Blessed one. He having obtained his own great wisdom, declares this world, the Divine, the Mára(3), the Brahman, the Samana Brahman, the Sentient, the Regal and Human (worlds). He preaches Dhamma (4), and declares the Brahmachariya (5), which is perfect as regards time and quality, meaning and grammar.

---

(1). Bhikkhu—A person who lives on fragments; a Buddhist Priest.

(2.) Sakya—The reigning race at that time in India; Buddha was of this race.

(3.) Mára—The Personification of death. The great opponent of Buddha.

(4.) Dhamma—Doctrine, also order, thought, &c.

(5.) Brahmachariya—Celibacy, chastity, continence.

Very well ! Such a form has the appearance of Rahatship. Then Weranja Brahmin, Was Bagawá in any place (1) came to that place ; and having arrived and accosted (him) concluded with Bhagawá, a complimentary conversation, sat down on one side. Weranja Brahman, who was seated on one side, said this to Bhagawá :—It has been heard by me, O virtuous Gotamo, that the Samana Gotamo neither salutes reverently nor stands up (before), nor invites to a seat, decayed, reverend, aged, ancient Brahmins. So it is, O virtuous Gotamo, that the virtuous Gotamo neither salutes reverently nor stands up (before) nor invites to a seat Brahmins who are decayed, reverend, ancient, arrived at old age. This is not proper, O virtuous Gotamo that it should be so.

I do not perceive, O Brahman, either in the Divine Mára Brahman, Samana Brahman, Sentient, Regal or Human worlds, beings who may either be worshipped, or stood up before, or invited to a seat by me. O Brahman, if Tathágato (2) were either to worship, or stand up before, or offer a seat to any one, his head would fall off.

The illustrious Gotamo is uncivil.—O Brahman, there is a cause, and by that cause it may well be said, that the illustrious Gotamo is uncivil. O Brahman, these, viz., taste, the desire for form, sound, smell, taste, and feeling, are separate from Tathágato, and like the palmyra cut up at the root, which has no further existence nor another birth. This is the rule, O Brahman, and by that rule it may well be said, that the Samano Gotamo is uncivil; but not on the account of which you speak.

(1.) A set form in the Pali, used, as there is no relative pronoun. More lit : "By what was Bhagawá? By that he came."

(2.) Tathágato—Various meanings, as, "he who thus has departed," or, "he who thus came." The Teacher.



The illustrious Gotamo is destitute.—O Brahman, there is a cause, and by that it may well be said, the Samano Gotamo is destitute. O Brahman, these, viz., food (objects) for form, sound, smell, taste, and feeling are separated from Tathágata, and like the palmyra cut up by the roots, which has no further existence nor future birth. This is the cause, O Brahman, and by that it may well be said, the Samano Gotamo is destitute; but not on the account of which you speak.

The illustrious Gotamo is unpractical.—There is a rule, O Brahman, and by that it may well be said, that the Samano Gotamo is an unpractical person. I declare, O Brahman, my unpractical state. I declare the non-practice of the various kinds of sins and demerits connected with bodily misdemeanour, verbal misdemeanour, and mental misdemeanour. This is the rule, O Brahman, and by it it may well be said that the Samano Gotamo is an unpractical person; but not on the account of which you speak.

The illustrious Gotamo is an exterminator.—There is a rule, O Brahman, by which it may be well said of me, that the Samano Gotamo is an exterminator. I declare, O Brahman, my extermination. I declare the extermination of the various kinds of sins and demerits connected with desire, hatred, and ignorance. This is the rule, O Brahman, and by this rule it may well be said of me, the Samano Gotamo is an exterminator; but not on the account of which you speak.

The illustrious Gotamo is a despiser.—There is a rule, O Brahman, and by that rule it may well be said of me, the Samano Gotamo is a despiser. I despise, O Brahman, the arrivals at the various kinds of sins and demerits arising from evil deeds, evil words, and evil thoughts. This is the rule, O Brahman, and by that rule it may well be said of me, that the Samano Gotama is a despiser; but not on the account of which you speak.

The illustrious Gotama is a subjugator.—There is a rule, O Brahman, and by that rule it may well be said of me, the Samano Gotamo is a subjugator. I declare, O Brahman, the subjugating Dhamma. I declare the subjugating Dhamma of the various kinds of sins and demerits connected with evil desire, hatred, and ignorance. This is the rule, O Brahman, and by that rule it may well be said of me, the Samano Gotamo is a subjugator; but not on the account of which you speak.

The illustrious Gotamo is an ascetic (1.)—There is a rule, O Brahman, and by that rule it may well be said of me, the Samano Gotamo is an ascetic. I declare, O Brahman, the ascetism (literally scorching) of the course of sins and demerits. I declare, O Brahman, the scorplings of evil deeds, evil words, and evil thoughts. To any person is there the renunciation of the courses of sins and demerits, as the palmyra tree cut up by the root has no existence and no other birth? I declare that ascetism. To Tathágato, O Brahman, are the scorplings and renunciations of sins and demerits, as the palmyra tree when cut up by the roots has no being nor future birth. This is the rule, O Brahman, and by that rule it may well be said of me, that Samano Gotamo is an ascetic; but not on the account of which you speak.

The illustrious Gotamo is excluded from birth.—There is a rule, O Brahman, and by that rule it may well be said of the Samano Gotamo, that he is excluded from birth. As to any person, O Brahman, there are exclusions from another foetus, another state, and another birth, like the palmyra cut up by the roots, which has no more being nor future birth. I declare that exclusion from birth. To him (to me) there are exemptions from becoming a foetus in the womb, another state,

---

(1.) Ascetic.—Pali *apaccaya* a scorcher, a burner, with reference to bodily desires, &c.

and another birth, as the palmyra cut off at the roots has no future existence nor future birth. This is the rule, O Brahman, and by that rule it may well be said, that the Samano Gotamo is excluded from birth ; but not on the account of which you speak.

O Brahman, as the hen when sitting on 8, 10 or 12 eggs, having warmed them and turned them, the one from her brood who first either with his bill or claws breaking the shell comes with health out of it,—what do you call him? The elder or the younger? O virtuous Gotamo, it is proper to call him the eldest ; he is the eldest.

In the same manner, O Brahman, I, having split the shell of ignorance connected with the received shell of folly and existence, am alone in this world the incomparable, the true, the omniscient and illustrious Buddha. That I, O Brahman, am supreme and chief of the world. By me, O Brahman, was begun untiring effort, durable, fixed, and unerring memory, a subjugated body in which lust was conquered, and a peaceful heart having only one object (in view). That I, O Brahman, arrived and dwelt in the First Jhāna, (1,) having become exempt from desire, and a sinning nature, (with which Jhāna is connected) reason, investigation, and the pleasure of isolation. And having surmounted reason and investigation, I arrived at and dwelt in the Second Jhāna, connected with clearness of intellect, mental effulgence, the relinquishment of reason and investigation, and the joy and pleasure arising from mental tranquillity. Having subjugated joy, I arrived at and dwelt in the medium state—possessed memory, fixity of mind, and bodily ease, and that which the Rahats call the delightful

---

(1.) Jhāna.—A state of knowledge. There are four Jhānas, the nature of which both in Brahmanism and Buddhism is very similar.—See *Wilson, Dhayāna*.

abode of indifference and mind ; and thus I arrived at and dwelt in the Third Jhāna. I (then) arrived at and dwelt in the Fourth Jhāna, connected with the extinction of former joys and sorrows, the extinction of former pleasures and pains, which has neither sorrow nor joy, (but) the purity of heart which arises from isolation.

Thus, when I had subdued, purified, cleansed, washed, separated from lusts, rendered soft, prepared for good action, and made my heart firm, I bent my mind to the recollection of former states (of existence). In what manner? 1 birth, 2 births, 3 births, 4 births, 5 births, 10 births, 20 births, 30 births, 40 births, 50 births, 100 births, 1,000 births, 100,000 births, various destructive kalpas, various kalpas of formation ; in such and such a place there was such and such a name, such a tribe, such a colour, such a possessor of food, and endured such pleasure and pain ; and so he (I) having arrived at old age, departed from that state, and was born in such and such a place, and was of such a name, such a tribe, such a class, such a proprietor, and endured such pleasure and pain. And thus having reached the end of life, departed from that state, and was born here.

In this manner I remember various prior states of existence. By me, O Brahman, in the first watch of the night was attained the first (gradation) of wisdom. Ignorance departed, and wisdom was attained ; darkness fled, and light was produced. In a certain way, with a fixed memory, and the purpose of subjugating desires, and separated from lust, to me, O Brahman, came the first Great achievement, as the chick comes out of the shell ; and so that I, when I had established a peaceful, pure, clear, abstract, separate from defilement, and a good-natured heart, bent my mind to the deaths and births of animals.

That person (I) with a divine, clear, and superhuman eye behold beings. I know beings who die, are born, are debased, excellent, of good report, of ill report, of good disposition, of ill disposition, according to the nature of their actions; that certainly these creatures, O fortunate one, who are addicted to evil actions, evil words, and evil thoughts, who are revilers of Rahats, heathens, and partakers of the actions of heathens—these, on the dissolution of the body, after death, are born in the Apáya (1), Duggati (2), Winipáta (3), and Niraya (4) hells; and these creatures, O fortunate one, who are practised in good deeds, good words, and good thoughts, who are not revilers of Rahats, pure religionists, and partakers of the actions of those religionists—these, on the dissolution of the body, after death, are born in the good and heavenly world. So I perceive with the divine, clear, and superhuman eye, creatures, and know creatures who die, are born, are debased, excellent, of good report, of ill report, of good disposition, of bad disposition, according to the nature of their actions. By this person, me, O Brahman was attained, the Second Wíjjá (5); ignorance was dispersed, and Wíjjá produced; darkness fled, and light came. In this manner, to me, O Brahman, who was industrious, active, and dwelling apart, happened the second Exodus, as the chick bursts from its shell. That I, when I had thus established a peaceful, pure, clear, abstract, separate from defilement, and a good-natured heart, bent my mind to the wisdom of the extinction of sensual desires. I knew that this is sorrow from its very nature. I knew

- 
- (1.) Apáya.—Apa, not; aya, ease.
  - (2.) Duggati.—Du, bad; gati, nature or disposition.
  - (3.) Winipáta.—Wi, intensive prefix; ni, ditto; pata, a falling.
  - (4.) Niraya.—Nir, not; nya, good fortune.
  - (5.) Wíjjá.—An advanced state of knowledge.

from its nature that this is the *cause* of sorrow. I knew from its nature that this is the *extinction* of sorrow. I knew from its nature that this is the *means* for the extinction of sorrow. I knew from their nature these are sensual desires. I knew from its nature this is the *cause* of sensual desire. I knew from its nature this is the *extinction* of sensual desire. I knew from its nature that this is the *means* of the extinction of sensual desire. To that person, me, who thus knew and saw, happened the deliverance of the heart from sensual desires, from the desire of existence, from the desire of external objects, from cleaving to ignorance, and as regards emancipation came wisdom; and I knew the Brahmachariya which is called the wasted state, how it is effected, and that afterwards it will not be so and so. O Brahman, to me, in the last watch of the night came the Third Wijjā; ignorance departed, and knowledge was produced, darkness fled, and light came. To me, O Brahman, in this manner, who was industrious, active, and dwelling in seclusion, happened the Third Exodus, as the chick bursts forth from its shell.

When he had thus spoken, Weranja Brahman said this to Bhagawá:—The illustrious Gotamo is excellent; the illustrious Gotamo is supreme. It is refulgent, O Gotamo; it is refulgent, O Gotamo! As by any means an inverted thing may be set upright, or a secret revealed, or to one who has erred the path be shewn, or in darkness a lamp may be lit and carried, or a figure shewn to the eye of him who sees; just so, in various ways, the Dhamma is proclaimed by the illustrious Gotamo. I go to the Refuge (1) of that illustrious Gotamo, and to the Dhamma and company of Bhikkhus. May the illustrious

---

(1.) Refuge.—Sarana, from sara “to go.” This form is used by all Buddhists, similarly to prayer by Christians.

Gotamo receive me as a Buddhist layman ; from this day forward, till life shall close, may the refuge be granted me, which I have arrived at, and may I be favoured by the illustrious Gotamo, with the great company of Bhikkhus, observing Was(1) in Weranji. The illustrious Bhagawá assented by being silent. Then Weranja Brahman knowing that Bhagawá had assented, rose from his seat, saluted Bhagawá, and departed, having his right side presented (2).

At that time there was a famine in Weranja; men's minds were distracted, they became like skeletons, their crops failed, and it was not easy by begging to obtain a livelihood. At that time horse-dealers from the North arrived at Weranja, in the Was season, with about 500 horses, and there in the horse-sheds were some measures of gram prepared. The Bhikkhus at dawn of day having robed themselves and taken their bowl and robes, and not having received any alms, came to the horse-sheds, took some measures of gram, pounded and pounded them in a mortar, and eat them. The Venerable Anando having ground on a rock a vessel full of the gram, brought it near to Bhagawá. Bhagawá ate it. Bhagawá, hearing the sound of the mortars (and pestles)—(knowing a matter Tathágatás enquire, knowing a matter they do not enquire; knowing the time they enquire; knowing the time they do not enquire; purposely Tathágatás enquire, not without a purpose, but for removing the cause of there not being a purpose to Tathágatás. There are two modes in which the wise Bhagawás question the Bhikkhus (saying) Shall we preach the Dhamma, or promulgate the Commandments to the disciples?)—Then Bhagawá called the

(1.) Was; lit. rain.—A season of seclusion among Buddhist Priests for a period of three months.

(2.) A respectful form of going out of the presence of a dignitary.

Venerable Anando, What is this pounding noise? Then the Venerable Anando made known the matter to Bhagawá. Very well, very well, O Anando, mankind will think that by you virtuous men victory was gained over grain, meat, and rice.

Then the Venerable Great Moggaláno (1) came to the place where Bhagawá was, and having arrived and reverently saluted Bhagawá, sat down on one side, and the Venerable and Great Moggaláno who was seated on one side, said this to Bhagawá:—There is now a famine, O Lord, in Weranja, people are distracted and reduced to skeletons, the crops have failed, and it is by no means easy to gain a livelihood by gleaning (begging). O Lord, underneath the surface of the Great Earth there exists (something) comparable to small drops of honey, and there being no bees, it will be good. Is it good, O Lord, may I overturn the earth? The Bhikkhus will then eat that edible crust of the earth. There are creatures, O Moggaláno, in the earth. How will you treat them? I will preserve the creatures, O Lord (by making another world), and how many creatures soever there may be in this world, I will collect and place them there, and with one hand I will overturn the earth. It is not proper, O Moggaláno; do not wish to overturn the world; the creatures may experience discomfort. Very well, O Lord, shall the whole company of Bhikkhus go to the north to ask alms? It is not proper, O Moggaláno; do not wish that all the company of Bhikkhus should go to the northern continent to collect alms.

Afterwards this kind of thought and reasoning happened to the Venerable Sáríputtoo who was retired and in solitude:—How is it that the Brahmachariya of such Buddho Bhagawás

---

(1.) Moggaláno.—One of the two Chief Priests of Buddha, who attended him throughout his ministrations.



continued not for a long time, and how was it that the Brahma chariya of such Buddho Bhagawás continued a long time? Afterwards the Venerable Sáriputto at eventide coming forth from his solitude, came to the place where Bhagawá was, and having reverently saluted Bhagawá, sat on one side. The Venerable Sariputto who was seated on one side, said this to Bhagawá. Here to me, O Lord, who was in secret and solitude, came this kind of thought and investigation: Which of the Buddho Bhagawás' Brahmachariya did not continue for a long time; and of which of the Buddho Bhagawás did the Brahmachariya continue for a long time? Of which of the Buddho Bhagawás, O Lord, did the Brahmachariya not continue for a long time? and of which of the Buddho Bhagawás Brahmachariya did continue for a long time?

O Sariputto, the Brahmachariya of Wipassa Bhagawá, of Sikhi Bhagawá, and of Wessabhu Bhagawá was not of long duration; and the Brahmachariya, O Sariputto, of Kakusanda Bhagawá, of Konágama Bhagawá, and of Kasappa Bhagawá continued for a long time.

O Lord, what was the cause, and what the means by which the Brahmachariya of Bhagawá Wipassa, of Bhagawá Sikhi, and of Bhagawá Wessabhu, continued only for a short time?

O Sariputto, Bhagawá Wipassa, Bhagawá Sikhi, and Bhagawá Wessabhu became disheartened in declaring their Dhamma at length to their disciples. The Sutta (7), Geyya (8),

- 
- |      |                                                         |                                 |
|------|---------------------------------------------------------|---------------------------------|
| (1.) | Wipassi Buddha.                                         | The 19th Buddha of this system. |
| (2.) | Sikhi do.                                               | 20th do.                        |
| (8.) | Wessabhu do.                                            | 21st do.                        |
| (4.) | Kakusandha do.                                          | 22nd do.                        |
| (5.) | Kanagamo do.                                            | 23rd do.                        |
| (6.) | Kassapo do.                                             | 24th do.                        |
| (7.) | Sutta, oral declaration.                                |                                 |
| (8.) | Geyya, a kind of mixed composition of prose and poetry. |                                 |

methodical compositions, stanzas, pleasing words, their revealed births, wonderful doctrines, and dialogues were few ; instructions and discipline were not imparted to the disciples, and the Páti Mokka (1) was not shewn ; and from the disappearance of these Buddho Bhagawás, and from the disappearance of their contemporary disciples, their subsequent followers being of various names, various tribes, various castes, and various kinds of ascetics, their Brahmachariyas quickly became extinct. As in any way, whatsoever, O Sáriputtoo, when flowers of various kinds are placed on a shelf without being strung together, the wind shakes, scatters, and strews them about. What is the cause of that? Because they are not united by a string. Just so, O Sáriputtoo, from the disappearance of those Buddho Bhagawás, and the disappearance of the disciples contemporary with those Buddhos, their subsequent followers being of various names, various tribes, various castes, and various kinds of ascetics, their Brahmachariya quickly became extinct.

These Bhagawás became not weary of declaring, advising perfectly, the hearts of their disciples. O Sáriputtoo, at a former time, the Blessed, the Sanctified, the True and Omniscient Wessabhu Buddho, in a certain fearful jungle, knowing intimately their hearts, exhorted 1,000 Bhikkhus:—Reason thus ; thus ye must not reason ; thus consider ; thus ye must not consider ; remove this ; being thus situated, remain. Then to Sariputtoo and the 1,000 Bhikkhus who had been thus exhorted and admonished by the Blessed, the Sanctified, the True and Allwise Wessabhu, came deliverance of their hearts from the desire of existence. There, O Sariputtoo, to that

---

(1.) Páti Mokka:—a book in the Winiya Piṭaka, containing rules on monasticism.

fearful jungle, happened a wonder. Any person who entered that jungle, if he were not free from desire, all his hair stood on an end. This was the *cause*, O Sariputto, and this the *means* of the Brahmachariya of Bhagawá Wepassi, Bhagawá Sikhi, and of Bhagawá Wessabhu continuing for a short time only.

What, O Lord, was the *cause*, and what the *means*, by which the Brahmachariya of Bhagawá Kakusandho, of Bhagawá Konagama, and of Bhagawa Kassapa, continued for a long time?

O Sariputto, Bhagawá Kakusandho, Bhagawá Konagamo, and Bhagawá Kassapo became not weary of explaining their Dhamma at length to their disciples. The Sutta, Geyya, methodical compositions, stanzas, pleasing words, revealed births, wonderful doctrines, and dialogues, were very extensive. Instruction and discipline were imparted to their disciples, and the Páti Mokka was enunciated. (Therefore) on the disappearance of those Buddho Bhagawás and their contemporary disciples, their subsequent followers being of various names, various tribes, various castes, and various kinds of ascetics, established their Brahmachariya for a long time. As in any way, O Sariputto, a number of flowers which are strung together and placed on a board, the wind neither shakes, scatters, nor strews them about. What is the cause of that? Because they are well joined by a string. Just in the same manner, O Sariputto, on the disappearance of those Buddho Bhagawás and their contemporary disciples, their subsequent followers being of various names, of various tribes, various castes, and various kinds of ascetics, they established for a long time their Brahmachariya. This, O Sariputto, was the *cause*, and this the *means*, of the Brahmachariya of Bhagawá Kakusandho, of Bhagawá Konagama, and of Bhagawá Kassapa, continuing for a long time.

Afterwards, Sariputto having risen from his seat, with his robe covered one shoulder, and worshipped Bhagawá in the place where he was, by joining his hands at his forehead, said this to Bhagawá:—O Bhagawá, this is the time for that; this is a good time for that. May Bhagawá proclaim the discipline to the disciples; may he declare the Páti Mokka. In some way or other the Brahmachariya will continue for a long time. Wait, O Sariputto; wait, O Sariputto, Tathágata knows the time. Until that time, O Sariputto, the Teacher proclaims not his discipline, nor declares the Páti Mokka. Until workings of lust descend to some of the priesthood, and till after, O Sariputto, the workings of lust have descended to the priesthood, the Teacher does not proclaim the discipline to his disciples, nor the Páti Mokka, for the destruction of the operations of those lusts. Then, O Sariputto, some of the priesthood are not subject to the workings of lust. The priesthood is not yet become experienced nor extensive. O Sariputto, when the priesthood has become experienced and extensive, then the operations of desire descend to some of the priesthood, and then the Teacher declares his discipline to the disciples, and proclaims the Páti Mokka for the destruction of the operations of lust. Then, O Sariputto, the operations of lust do not descend to some of the priesthood. The priesthood is not yet become *great*. O Sariputto, when the priesthood has arrived at a *great* state, then, the operations of lust descend to some of the priesthood; and then the Teacher declares the discipline to the disciples, and proclaims the Páti Mokka for the destruction of the operations of those lusts; then, O Sariputto, the workings of lust do not descend to some of the priesthood. The priesthood has not yet come to the state of receiving great offerings. When the priesthood has arrived at the state of receiving great offerings; then the

operations of lust descend on some of the priesthood; and then the Teacher proclaims the discipline to the disciples, and declares the Páti Mokka for the destruction of the operations of those lusts; and then, O Sariputto, the workings of lust do not descend on some of the priesthood. The priesthood has not yet arrived at the *great truths* (of Buddha's doctrine). When the priesthood has arrived at the *great truths*, then the operations of lust descend on some of the priesthood, and then the Teacher proclaims the discipline to the disciples, and declares the Páti Mokka for the extinction of the operations of those lusts. O Sariputto, the company of Bhikkhus being faultless, separate from evil, reformed, pure, settled in merit, among these 500 great Bhikkhus the least of them is arrived at Sowan path, delivered from extinction, having Nirwana as a certainty; also the future paths.

Afterwards Bhagawá said to the venerable Anando, That which I intend to declare will henceforth become a custom. If any one has been invited to pass the Was season, he must not depart without informing (him who invited him). O Anando, let us go and inform Weranja Brahman. Just so, O Lord, answered Anando to Bhagawá. Then Bhagawá having robed himself, and taken his bowl and robes, with Anando as his attendant, came to the place where Weranja Brahman's house was, and having arrived, sat on the prepared seat.

Then Weranja Brahman came to the place where Bhagawá was, and having arrived and reverently saluted Bhagawá, sat on one side. Then Bhagawá said this to Weranja Brahman who was seated on one side: O Brahman, we have completed the Was, to which you have invited us. We inform thee that we desire to depart to journey in inhabited districts. Truly, O virtuous Gotamo, you were invited by me for the

Was season ; but I have not given anything which may be proper to bestow. I did not give, not because I had it not, nor because I did not wish to give. When can this be done by the laity with their many duties and cares ? May the illustrious Gotamo consent to come with the company of Bhikkhus to partake of food to-morrow ? Bhagawá by silence gave consent. Afterwards Bhagawá having declared a doctrinal speech to Weranja Brahman, implanted it in his heart, produced a desire (towards it), and made him satisfied (with it), arose from his seat, and departed.

Afterwards, when the night had gone, Weranja Brahman having provided proper and suitable food, made known the time to Bhagawá (saying), O Lord, virtuous Gotamo, the meal is ready. Then Bhagawá, in the morning, having robed himself and taken his bowl, and robes, came to the place where Weranja Brahman's dwelling was, and having arrived, sat on the seat provided for him, with the company of the Bhikkhus. Then Weranja Brahman having provided with his own hands food for the Bhikkhus and their chief, Buddha, which food was delicious, fit, and suitable to be eaten,—when Bhagawá had eaten, and the bowl was put aside, Weranja clothed Bhagawá with three robes, and each of the Bhikkhus with a pair of cloths. Afterwards Bhagawá having declared a doctrinal speech to Weranja Brahman, implanted it in his heart, produced a desire (towards it), and made him satisfied (with it), arose from his seat, and departed. Afterwards Bhagawá having resided in Weranja as long as he wished, without going to Soreyya, Samkassam, or Kantakujja, came to the place where the river Páyaga was, and having arrived and crossed over, came to Benares, and having dwelt as long as he wished there, came to Wesali city, and according to custom, dwelt there, in the Rock Hall in the great jungle near Wesali.

The Weranja Bana portion is finished.

## No. II. *Parájika Book.*

---

THERE was at that time a village not far from Wesali, called Kalanda village. A chetty, Sudinno, the son of Kalanda lived in it. At that time, Sudinno of Kalanda, from some cause or other, went to Wesali with several of his companions. On that occasion Bhagawá was seated in the midst of many of his attendants preaching the Dhamma. When Sudinno of Kalando had seen Bhagawá seated in the midst of his attendants, and preaching the Dhamma to him, it thus happened (he thought thus)—It will be good if I also hear this Dhamma. Then Sudinno came where the crowd was, and sat down on one side, and to Sudinno, who was seated on one side, came this thought:—By some means or other I have heard the Dhamma proclaimed by Bhagawá; (but) it is not easy to practise the truly complete, holy, and pure, Brahmachariya, by those who are householders, and dwell in the lay state. It is good therefore, if I having shaven my head and beard, assumed the yellow robes, and renounced the lay state, become a mendicant cleric. Then that company, when it was well instructed, had well taken to heart, was interested, and having appreciated the Dhamma, rose from their seats, reverently saluted Bhagawá, and departed keeping their right side towards (Buddha.)

Then Sudinno, not long after the company had arisen, went to the place where Bhagawá was, and having arrived, and reverently saluted Bhagawá, sat on one side. Sudinno, who was seated on one side, said this to Bhagawá:—By

---

(1.) Sudinno is always called the son of Kalando, throughout the narrative, but I have omitted it.

some means or other, O lord, I have heard the Dhamma declared by Bhagawá, (but) it is not easy to practise the truly complete, holy, and spotless Brahmachariya, by those who are householders and dwell in the lay state; it is good, therefore, if I, having shaven my head and beard, assumed the yellow robes, and renounced the lay state, become a mendicant cleric. May Bhagawá ordain me ! Hast thou, Súdunno, obtained the consent of thy mother and father, to renounce the lay state and become a mendicant cleric? I have not, O Lord, obtained the consent of my mother and father to renounce the lay state and become a mendicant cleric. O Súdunno, Tathágato does not ordain him who has not obtained the consent of his mother and father. He said, I, O Lord, will do so, since my mother and father may consent to my renouncing the world and becoming a mendicant cleric.

Then Súdunno, having finished whatever he had to do in Wesáli, went to Kálanda village, where his mother and father were, and having arrived there, said this to his mother and father:—O mother, O father, by some means or other, I have heard the Dhamma preached by Bhagawá, (but) it is not easy to practise the truly complete, holy, and spotless Brahmachariya, by those who are householders, and dwell in the lay state. I wish to receive tonsure, assume the yellow robes, and become a mendicant cleric, separate from the laity. Grant permission to become a mendicant cleric, separate from the laity. When he had thus spoken, the mother and father of Súdunno said to Súdunno, O thou child, Súdunno, who art dear (to us); thou hast pleasure, and hast been tenderly nourished, thou hast not experienced any sorrow. Even by death we cannot desire your separation. What! shall we then consent, while you are alive, that you should separate from the laity, and become a mendicant cleric?



And so the second time the mother and father of Sudinno said to Sudinno, Thou art, O child Sudinno, our only son, well-beloved, surrounded by pleasures, and tenderly nourished. Thou art unacquainted with grief. And the third time, Sudinno said to his mother and father:—O mother, O father, by some means or other, I have heard the Dhamma proclaimed by Bhagawá, (but) it is not easy to practise the holy, complete, holy, and spotless Brahmachariya, by those who are householders and dwell in the lay state. I wish (therefore) having shaven my head and beard, assumed the yellow robe, and separated from the laity, to become a mendicant cleric. Give permission that I may separate from the world, and become a mendicant cleric. And the third time the mother and father of Sudinno said this to Sudinno:—Thou art, O child, our only son, well-beloved, surrounded by pleasures, tenderly nourished, and unacquainted with any grief. Even by death we cannot desire to be separated from you. What then! shall we consent, while you are still living, that you should separate from the laity, and become a mendicant cleric.

Then Sudinno thought:—My mother and father do not consent that I should become a mendicant cleric, separate from the laity: and fell down there on the bareground (saying) Either here will I die, or become a mendicant cleric. Then Sudinno did not partake of one meal, 2 meals, 3 meals, 4 meals, 5 meals, 6 meals and 7 meals. Then the mother and father of Sudinno, said this to Sudinno:—Thou art, O child, our only son, well-beloved, surrounded by pleasures, tenderly nourished and unacquainted with any grief; even by death we cannot desire separation from you. What then, shall we consent, while you are still alive, that you should separate from the laity, and become a mendicant cleric. Get up, O child, Sudinno, eat and drink, and surrounded by your companions

eating, drinking, with your retinue enjoying yourself, and performing merits, become cheerful. We do not consent to your separation from the world, and that you should become a mendicant cleric. When that was said, Sudinno was silent; and the second time, &c. And the third time also, the mother and father of Sudinno said this to Sudinno:—Thou art, O child Sudinno, our only son, well-beloved, surrounded with pleasures, tenderly nourished, and unacquainted with any grief. Even by death we cannot desire separation from thee. What then! shall we consent, while you are still alive, that you should separate from the lay state, and become a mendicant cleric? Get up, O child Sudinno, eat and drink, and surrounded by your companions, eating, drinking, with your retinue enjoying yourself, and performing merits, become cheerful. We do not consent to your separation from the world, that you should become a mendicant cleric. And the third time Sudinno, the son of Kalando, was silent.

Then the companions of Sudinno went to the place where Sudinno was, and having arrived, said this to Sudinno:—Thou art, O friend Sudinno, the beloved and only son of thy mother and father, endeared, surrounded with pleasures, tenderly nourished, and established in ease. O friend Sudinno, thou hast not known any grief; and by death even, your mother and father do not desire your separation. What then! will they consent, while you are alive, that you should separate from the world, that you may become a mendicant cleric?

Get up, O friend Sudinno, eat and drink, and surrounded by your companions, &c.—*Vide supra.*

When they had thus said, Sudinno was silent; and the second time, &c.; and the third time, &c., &c.

And the third time also Sudinno was silent. Then the companions of Sudinno went to the place where the mother

and father of Sudinno were, and said this to the mother and father of Sudinno :—O mother, O father, that Sudinno, fallen on the bare earth, says, Either here I will die, or receive ordination. If ye do not give leave to Sudinno to separate from the world, and become a mendicant cleric, he will die there ; (but) if you give permission to Sudinno to separate from the world, and become a mendicant cleric, you will see him again ; and if he does not delight in separation from the world, and the state of a mendicant cleric, another disposition will come to him, and he will return again to this place. Give permission to Sudinno to become a mendicant cleric, separate from the laity.—We consent that our child, Sudinno, shall become a mendicant cleric, separate from the laity.

Then the companions of Sudinno went to the place where Sudinno was, and having arrived, said this to Sudinno :—Get up, O friend Sudinno ; thou art permitted by thy mother and father to forsake the world, and become a mendicant cleric. Then Sudinno said :—I am permitted by my mother and father to separate from the world and become a mendicant cleric ; and being glad, well pleased, joyful, and rubbing his body with his hands, he rose up.

Afterwards, Sudinno having for several days strengthened himself, went to the place where Bhagawá was, and having arrived and saluted Bhagawá, sat down on one side. Sudinno who was seated on one side said this to Bhagawá :—I am permitted, O lord, by my mother and father to separate from the world, and become a medicant cleric. May Bhagawá ordain me. Sudinno received ordination (Sámanera) (1) and (2) Upsam-

---

(1.) Sámanera.—A clerical novice, whose age must be at least eight years to receive ordination.

(2.) Upasampadá.—A superior priest, not under twenty years of age.

padá, near Bhagawá; and the venerable Sudinno having subjugated his desires, became a dweller in the wilderness, a mendicant, a wearer of castaway garments, and a methodical beggar (1) (*i. e.*, one who asks from every house) and resided near a certain Wajji village.

Afterwards there was a famine in Wajji, men's minds were distracted, they were reduced to skeletons and every thing sown become blasted. It was not easy, therefore, to gain a living by gleaning (alms-asking). Then this thought came to the venerable Sudinno:—In this Wajji is a famine, men's minds are distracted, they are reduced to skeletons, and the crops are blasted. It is not easy, therefore, to get a living by gleaning, (but) I have many relatives in Wesáli who are rich, very wealthy, great proprietors, and have more than sufficient gold and silver, superabundant means and enormous quantities of grain, &c. It is good if I reside near my relatives. My relatives on my account will bestow gifts and perform merits; Bhikkhus will be benefited, and I shall not become weary in begging. Then the venerable Sudinno having rolled up his mat and taken his alms-bowl, and robes, departed for Wesáli and dwelt there after the *former* (2) custom. Then the venerable Sudinno dwelt in the great Wesáli jungle near the great Rock hall. The relatives of the venerable Sudinno heard that Sudinno had arrived at Wesáli, and they brought and presented about 60 vessels of rice to the venerable Sudinno. Then the venerable Sudinno having divided the 60 vessels of cooked food among the Bhikkhus, dressed in the early morning, and taking his bowl and robes, entered the village of Kalando.

(1.) A command given by Bhagawá to his clerics, that they should omit no house when alms-asking.

(2.) Appointed.

As he was methodically collecting alms in Kalandō village, he came where his father's house was, at a time when a female servant of the relatives of the venerable Sudinno was thinking about throwing away some stale rice, the remains of the previous evening meal. Then the venerable Sudinno said to the servant-maid of his relatives:—If you have a throwing away Dhamma (purpose) O sister, put it into my bowl. The servant-girl of the venerable Sudinno's relatives put the stale rice which was left from the previous evening meal into the bowl, and recognized the marks of his hands, feet, and voice. Then the maid-servant of the relatives of the venerable Sudinno went to the place where the mother of the venerable Sudinno was, and having arrived, said this to the mother of the venerable Sudinno:—What do you think! Our master Sudinno has come.—Do you speak the truth, you wench? If so, I will emancipate you.

Afterward the venerable Sudinno ate the stale rice in a retired place. The father of the venerable Sudinno coming home from his work, saw the venerable Sudinno eating the stale rice in a retired place, went to the place where the venerable Sudinno was, and having arrived, said this to the venerable Sudinno:—Truly, O child Sudinno, will you eat stale rice? Truly, O child Sudinno, it is proper to go to your own house.—I went to your house, and there I received this stale rice. Then the father of the venerable Sudinno having taken hold of the arm of the venerable Sudinno, said this to the venerable Sudinno:—Come, O child Sudinno, we will go to the house. Then the venerable Sudinno went to the place where the house was, and having arrived, sat on the seat spread out for him. The father of the venerable Sudinno said to the venerable Sudinno,—Eat, O child Sudinno. Not so, O layman, I have eaten my food for to-day.—Consent, O child

Sudinno to eat rice to-morrow ! The venerable Sudinno by silence assented. Then the venerable Sudinno having risen from his seat departed.

Then the mother of the venerable Sudinno, after that night, having smeared the floor with new cowdung and caused to be made two heaps for him, one of gold coins, and the other of gold,—those two offerings were so great that a man on this side sees not a man on that; *et vice versa*,—she covered over those heaps with mats, prepared a seat in the middle, suitably surrounded (ornamented) them, and called the former wife of the venerable Sudinno. Now, O woman, put on those ornaments, and beautify yourself in a manner most pleasing to Sudinno.—Just so, O lady; answered the former wife of the venerable Sudinno to the mother of the venerable Sudinno.

The venerable Sudinno at dawn having clothed himself and taken his bowl and robes, went to the place where his father's dwelling was, and having arrived, sat on the prepared seat. Then the venerable Sudinno's father came where the venerable Sudinno was, and having uncovered the heaps, said this to the venerable Sudinno:—O child Sudinno, these are thy mother's property, the woman's dowry, that which is proper to be given to the female. The father's property is separate—our ancestors' too is separate; O son Sudinno, having disrobed yourself, you may receive this property, and perform meritorious actions. O father, I cannot attempt it, I am unable. I having a desire to the Brahmachariyat, will practise it. So the second time, &c., &c.; and the third time also the father of the venerable Sudinno said to the venerable Sudinno:—This is your mother's property, which was given as her dowry at marriage. The father's property is separate, and the grandfather's too. Take these things. O child Sudinno, possess these valuables, and perform merits, having come to the

lay state. Make up your mind, O Sudinno, to possess this property and perform merits.

Let us say this, O layman, if you will not become angry.— Say, O child Sudinno, said the father. Well then, O layman, get a large sack, fill it with the gold coins and the gold, put it into a cart, and throw it into the current in the middle of the river. If it be asked why. On account of these things may arise either fear, trembling, horripilation or trouble in keeping it. Then neither of these will happen to thee. When he had thus spoken, the venerable Sudinno's father became displeased, and said:—O child Sudinno, how can you speak thus?

Then the father of the venerable Sudinno called the former wife of the venerable Sudinno and said:—Because, O woman, you are dear and pleasing, it may be my son Sudinno will obey your word; if so, it will be well. Then the former wife of the venerable Sudinno embracing his feet, said this to the venerable Sudinno:—With what kind of expectation, O dear lord, do you practise the Brahmachariya? (1)—I do not, O sister, live as a celibic for the purpose of receiving a divine female, (said Sudinno.)

Then the former wife of the venerable Sudinno said:— From this day do you intend to call me sister; and fainted and fell on the floor.

Then Sudinno said to his father:—O layman, give me the food which is proper to be given, but don't bother me.

Eat, O child Sudinno. Then the mother and father of the venerable Sudinno with their own hands provided him

---

(1.) It appears that in those days men having become dissatisfied with their wives, became ascetics in order to accumulate merits, on account of which they would be able to marry a most beautiful goddess after death. Hence this question of the wife.

with, and persuaded him to partake of excellent food, until he was satisfied. Then the mother of the venerable Sudinno, when she had provided him with excellent food, and when his bowl was put aside, said this to him :—O child Sudinno, our family is rich, has large possessions, much food, much gold, and silver, much wealth and much grain. Receive all this, O Sudinno ; to possess these things, and having come to the lay state, perform merits. Come, O child Sudinno, possess these things, and perform merits.—O mother, I will not attempt it ; I am not able ; (for) with great desire I practise the Brahmachariya. And the second time, &c. And the third time also the mother of the venerable Sudinno said to the venerable Sudinno :—Now there is, O child Sudinno, a rich family, large possessions, much food, much gold and silver, much wealth and much grain. Therefore, O child Sudinno, give seed ; do not allow this, that the Lichchhawi (1) should carry off our heirless wealth.

I can do that, O mother, he said. Where do you dwell, O child Sudinno ? In the great jungle, O mother, he said. Then the venerable Sudinno having risen from his seat, departed ; and the mother of the venerable Sudinno called the former wife of the venerable Sudinno : Now, O woman, whenever you are in your courses, and the menses come, tell me. Yes, O lady, said the wife of the venerable Sudinno to the mother of the venerable Sudinno. Then the wife of the venerable Sudinno, after no long period, was in her courses, and the menses came ; and then she said to the mother of the venerable Sudinno, O lady, I am in my courses, the menses have come. Therefore, O daughter, bedizen yourself with the same ornaments by which you formerly pleased my son

---

(1.) Lichchhawi, probably Rájputs.



Sudinno, and gained his affection.—Just so, O lady ; answered the former wife of the venerable Sudinno to the mother of the venerable Sudinno. Then the mother of the venerable Sudinno, taking the former wife of the venerable Sudinno, came to the jungle where the venerable Sudinno was, and having come, said this to the venerable Sudinno :—Now, O child Sudinno ; now O child Sudinno ; our family is rich, has large possessions, much food, much gold and silver, much wealth, and much grain. Receive all this, O Sudinno, and to possess these things, come to the lay state, and to perform merits ; come, O child Sudinno, possess these things, and perform merits.

O mother, I will not attempt it ; I am unable to do it ; with great desire I practise the Bráhmachariya. And the second time, and the third time also the mother of the venerable Sudinno said this to the venerable Sudinno :—Now, O child Sudinno, our family is wealthy, has large possessions, much food, much gold and silver, much wealth and much grain. Receive all this, O child Sudinno, and give seed. Do not allow this, that the Lichchhawi should carry off our heirless wealth. I can do that, he said ;—and having taken hold of the arm of his former wife, and gone to the great jungle, *cohabited* (1) thrice with his former wife ; the discipline at that time having not been declared, and he not knowing that it was wrong. From that time she conceived. (Then) earthly deities caused this sound to be heard :—Certainly the company of the Bhikkhus is faultless, and free from evil, (but) by Sudinno a fault has been committed, and evil begotten. The gods of the Chátu Mahá Rájika worlds having heard the sound of the earthly deities, caused that sound to be heard, &c. The Távatimsa

---

(1.) Did “Methuna Dhamma,” the name of the first Párájiká.

gods, &c. The Yáma gods, &c. The Tusitá gods, &c. The Nimmána ratí gods, &c. The Paranimmita Wasawatti gods, &c. And the Brahmakáyiká gods caused this report to be heard:—Certainly the company of the Bhikkhus is faultless, and free from evil, (but) by Sudinno a fault has been committed, and sin begotten. At the same moment, and at that very instant, the sound ascended to the Brahma worlds.

Afterwards the former wife of the venerable Sudinno gave birth to a son who had arrived at maturity in her womb. Then the companions of the venerable Sudinno gave the name Bija (seedling) to his son; to the former wife of the venerable Sudinno, Bija Mátá (the mother of the seedling); and to the venerable Sudinno, Bija Pitá (the father of the seedling). Subsequently, both (the mother and the son) separated from the world, became mendicant religionists, and attained the state of Rahatship. Then to the venerable Sudinno came perplexity, and he repented, saying:—Certainly, I have sustained losses; certainly it is not profitable to me; certainly it is a bad matter; and certainly there is no gain. (Although) I have become a Bhikkhu of such a perfectly enunciated course of discipline, I shall not be able, to the end of life, to practise the perfect and holy Brahmachariya. In consequence of that perplexity and sorrow, he became thin, ill-favoured, disfigured, sallow, indifferent, morose, and sorrowful.

Then the fellow Bhikkhus of the venerable Sudinno said to the venerable Sudinno:—Formerly, O friend Sudinno, thou wast of a fair colour, of a captivating appearance, of a pleasing countenance, and a good complexion; but now thou art emaciated, ill-favoured, sallow, bent, with veins prominent, unsatisfied, morose, and sorrowful. What! do you not practise, O Sudinno, the Bramachariya, free from desire?

I have practised the Brahmachariya, but not without lust.

By me a sinful act has been committed, cohabitation with my former wife. I am perplexed on account of it, and much grieved. Certainly I have sustained losses; certainly it is not profitable to me; certainly it is a bad matter; and certainly there is no gain. And although I have become a Bhikkhu of the well-enunciated course of discipline, I shall not be able, to the end of life, to complete the perfect and pure Brahmachariya.—O friend Sudinno, you may well be perplexed and sorrowful. You having become a Bhikkhu of the well-enunciated course of discipline, will not be able, to the end of your life, to fulfil the perfect and pure Brahmachariya. O friend, has not the Dhamma, for the abandonment of lust, been declared by Bhagawá in various ways? This is not on the behalf of lust. The Dhamma for separation from lust, not for the fulfilling of lust; the Dhamma for the extinction of lust, not for the operation of lust. Now then, O friend, when Bhagawá has in various ways proclaimed the Dhamma for the abandonment of lust, you are meditating on lust; when the Dhamma for separation from lust has been declared, you are thinking of fulfilling lust, when the Dhamma for the extinction of lust has been declared, you are thinking on the operation of lust. O friend, has not the Dhamma by Bhagawá for the abandonment of lust been declared in various ways—for the subjugation of pride, for the suppression of the thirst (of lust), for the destruction of being, for the extermination of desire, for the refraining from lust, for extinction, and for Niwan? O friend, has it not been declared by Bhagawá in various ways, abandonment of lust, the knowledge of the characteristics of lust, the suppression of the thirst of lust, the excision of lustful thoughts, and the quenching of the burnings of lust?

This, O friend, is neither for the satisfaction of those who are now dissatisfied, nor for the further satisfaction of those

who are now well disposed. Again, O friend, it is for the further dissatisfaction of those who are still dissatisfied, and for causing a new state to those who are now well disposed. Again, O friend, if it be for the dissatisfaction of those who are still dissatisfied, some of those who are now well disposed, will become of another mind.

Then those Bhikkhus in various ways scoffed at the venerable Sudinno, and made known the fact to Bhagawá.

Then Bhagawá, for that cause, and that subject, caused the company of Bhikkhus to be assembled, and enquired of the venerable Sudinno:—Is it true, Sudinno, that you have cohabited with your former wife? It is true, O Bhagawá. Buddho Bhagawá censured him and said:—O wicked, empty, cross-grained, hideous, irreligious, unsanctified, and worthless man! O vain man, after being initiated in the well-enunciated course of discipline, how now will you be able to practise the perfect and pure Brahmachariya? Has not the Dhamma by me for the abandonment of lust, &c., &c.—*Vide supra*.

It were good for thee, O vain man, thou shouldst place thy private member in a most poisonous serpent's mouth; but it is not so, cohabiting with a woman. It were good for thee if thou shouldst place thy private member in the black serpent's mouth, &c., &c.; in a heap of burning charcoal, &c., &c. What is the reason? From either of those causes, O vain man, you may possibly neither die, nor on the dissolution of the body, by that cause, be born in either of the Apáya, Duggata, Winipáta and Niraya hells.

From this cause, O vain man, after the dissolution of the body, and death, you may be (will be) born in Apáya, Duggata, Winipáta or Niraya hells.

From that cause, O vain man, you will arrive at a sinful nature, an adulterous state, a degraded condition, lecherous

habits, unclean practices (*lit.* such as require ablutions), secret actions, and cohabitation. O vain man, thou hast been the originator of many sins. O vain man, this is neither for the satisfaction of those who are now dissatisfied, nor for the further satisfaction of those who are well disposed. Then, O vain man, if it be for the dissatisfaction of those who are ill-disposed, some of those who are now satisfied will become of another opinion. Then Bhagawá in various ways censured the venerable Sudinno, and having declared the disadvantages of the slothful man with regard to the difficulties of obtaining a livelihood, of satisfying his innumerable desires, and of quelling his discontent, declared in various ways the privileges of the man of few desires, of the satisfied man, of him who regulates his passions, of him who subdues his longings, of him who has a calm heart, of him who has but few cares, and of him whose energies are awakened; and having declared to the Bhikkhus a Dhamma discourse concerning duties and obligations, he said this to the Bhikkhus:—Now, O Bhikkhus, I will declare the precepts to the Bhikkhus, for ten purposes, viz., for the good of the assembly, for its ease, for the putting to shame sinful-minded persons, for the comfort of expert Bhikkhus, for the regulation of the desires concerning rewards in this life, for the extinction of desires for rewards in a future state, for the satisfaction of those who are ill-disposed, for the further satisfaction of those who are well inclined, for the advantages of those who are established in the true Dhamma, and for discipline. Therefore, O Bhikkhus, receive this precept:—If any Bhikkhu is guilty of cohabitation, he incurs a Párájiká fault, and becomes excommunicate.

So this precept by Bhagawá has been promulgated to the Bhikkhus.

[The conclusion of the Sudinno Bhána.]

The next instance given is one of beastiality, committed by a Bhikkhu in Wesáli, with a monkey. Many Bhikkhus were witnesses of his crime, and when they charged him with it, he endeavoured to exonerate himself by declaring that Buddha had hitherto prohibited only cohabitation with a woman. Bhuddha, as in the former case, severely reprimanded him, and declared that if any Bhikkhu cohabits with any kind of beast, from the least to the greatest, he is guilty of a Párajiká fault, and becomes excommunicate.

Very many Wajji Puttaka Bhikkhus in Wesáli having indulged themselves in luxurious eating, drinking and bathing, neglected their meditations, and through ignorance of their imbecility with regard to the observation of the precepts were guilty of Methuna Dhamma. Subsequently they, on account of affection to their kinsman and continued desire, went to the venerable Anando, and said thus to him :—O lord Anando, we have not despised, we have not despised the Dhamma, we have not despised the Priesthood, we have not despised self, and O lord Anando, we have not despised others ; (but) we are very unfortunate, and although we have a little merit from having been initiated in this declared course of discipline, yet we shall not be able, till the end of life, to complete the perfect and pure Brahmachariya. Now, O lord Anando, may we receive the cleric state, and the order of Upasampadá, in the presence of Bhagawá ; and may we be permitted to pass the first and last watches of the night in contemplation of the revelation of the meritorious Dhamma, and of the orthodox and wise Dhamma. It is good, O lord Anando, declare this to Bhagawá.—Just so ; the venerable Anando answered to the Wesáli Wajji Puttaka, and went to the place where Bhagawá was, and having arrived, made known the matter to Bhagawá. —It is difficult, O Anando : Tathágató has not the means either

as regards the Wajji people or the Wajji Puttakà, of abrogating the promulgation of the Párájika discipline as regards the clerical body. Then Bhagawá, for that cause and reason, having delivered a Dhamma discourse, called the Bhikkhus and said:—O Bhikkhus ! if any Bhikkhu, through ignorance of his imbecility with regard to the observance of the precepts, is guilty of Methuna Dhamma, when he has come (for the purpose of being ordained) is not worthy of being admitted to the Upasampadá order. Any one knowing his imbecility with regard to the observance of the precepts, if he is guilty of Methuna Dhamma, he is fit to be made Upasampadá, when he has come for it. And so, O Bhikkhus, receive this precept:—If any Bhikkhu, through ignorance of his imbecility with regard to the observance of the precepts, is guilty of Methuna Dhamma with any beast, from the least to the greatest, he incurs a Párájika fault, and becomes excommunicate.

The term *any one* is as follows :—A person of whatsoever degree, of whatsoever race, of whatsoever name, of whatsoever tribe, of whatsoever attainments, of whatsoever conduct, of whatsoever ability, whether an elderly man, or a youth, or a middle aged man ;—such *an one* is called *any one*.

06  
JUN 28 1920

# JOURNAL

OF THE

## CEYLON BRANCH

OF THE

## ROYAL ASIATIC SOCIETY.

1867—70.

### PART II.

### CONTENTS

|                                                                                                                | PAGE.     |
|----------------------------------------------------------------------------------------------------------------|-----------|
| Office Bearers                                                                                                 | v.        |
| Rules of the Society                                                                                           | vii.      |
| Do. Library                                                                                                    | xi.       |
| Do. Museum                                                                                                     | xii.      |
| List of Members.                                                                                               | xiii.     |
| Treasurer's Account from 4th December 1867, to 22nd March 1870                                                 | xv.       |
| Proceedings of Meetings                                                                                        | xvii.—xl. |
| Summary of the Contents of the First Book in the Buddhist Canon called the Párájika Book.—By the Rev. S. Coles | 151       |
| Párájika Book—No. I.                                                                                           | 164       |
| Párájika Book—No. II.                                                                                          | 166       |

COLOMBO:

PRINTED BY F. FONSEKA, CHATHAM STREET, FORT.

1870.











THE UNIVERSITY OF MICHIGAN

DATE DUE

JAN 20 1992

NOV 26 1991

MAY 14 1998

MAY 01 1998

UNIVERSITY OF MICHIGAN  
  
3 9015 02046 3447

APR 4 1941

UNIV. OF MICH.  
LIBRARY

